BOARD OF SUPERVISORS MEETING
April 5, 2016

"For all items *NOT* on the agenda"

(Each Speaker Limited to 3 Minutes)

Voluntary Sign-In Sheet
(Public Appearances – 1:30 pm)

1. Charles L. Ciuncio
2. BRUCE L. SEIVERTSON
3. James Decker
4. Linda Cassara ALINDA CASSARA
5.
6.
7.
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13.
14.
15.
16.

Date: 2/22/16
To: Those who control things
Subject: Real World

With age comes wisdom, and I am at the end of my run. I know my father was frustrated by me not using what he had learned about the real world, and with older experienced folks being ignored, the world is in a mess.

I can only speak about what I have experienced as a rural person and fifty plus years as a field forester. As one who has worked hard, gotten to a top, trained and lead people, I have found most in control (like most politicians) do not understand some basic things. I have gone through being a liberal progressive, being a conservative, and now just knowing real world truths are in play. I do not accept unproven theory, speculation, and protectionism, and I have been out-front by putting my thoughts into two books.

With older folks being ignored, the world is in a mess, Trump is a SOB that says a lot of real world truths in a way many working people think and act, and World war III is going to be a dousey.

Good Private Economy Equals More Tax Revenues

When you are in over your head
or
Facing a problem you have never faced before

Experience and common sense are golden

(Unproven legalese, theory, speculation, and protectionism are for the birds)

We need to feel good about what we have learned and done. Many need to shut-up and let field experience, common sense, and proven real world truths be the guide to getting things done right. We can only attempt to do what we can to make things better.

Charles L. Ciancio
(An old tired field forester and who has lived the real world no one gives much attention)
California Registered Professional Forester (RPF) #317
P.O. Box 172,
Cutten (near Eureka in redwood country), CA 95534
707-445-2179

Date: 3/15/16
To: Those who control things
Subject: Real World

Those running the show
(Like most media, politicians, well-to-do upper level,
proponents of using legalese, and Fourth Branch Government)
have not experienced and do not understand
what working people have and are experiencing

Our forefathers warned us about
A republic being replaced
By
A populist democracy
Controlled by a minority vote

Sadly, this is happening
In many places in California and the USA

Charles L. Ciancio
(An old tired field forester and who has lived the real world no one gives much attention)
California Registered Professional Forester (RPF) #317
P.O. Box 172,
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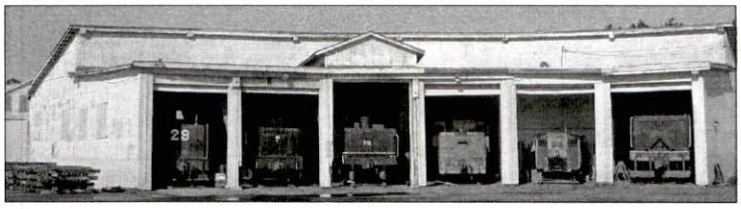
707-445-2179



TIMBER HERITAGE ASSOCIATION

P.O. Box 6399, Eureka, California 95502

A Public Benefit 501 (c) (3) Nonprofit Corporation www.timberheritage.org

Annual DINNER & AUCTION Benefit

For the Timber Heritage Museum and Excursion Train

To Our Friends and Supporters: All Aboard!

The Hammond Lumber Company Shops Complex has a long connection to Humboldt County history. Originally built in 1893 for the John Vance Lumber Company, the Roundhouse and Shops continue to be refurbished by dedicated, hardworking Timber Heritage Association volunteers. Restoration is a slow process but thanks to all of you, the Timber Heritage friends and supporters, THA has made good progress during 2015. More roofing has been replaced, failing exterior walls rebuilt, and the 1893 wood Roundhouse is getting a much needed coat of paint. Still, there is more that needs to be done to ensure that THA has appropriate buildings to display its timber heritage artifacts and develop a world class destination museum. Come have fun and continue to help THA preserve history at this year's **Roundhouse Rendezvous**! Remember, when you attend the dinner and auction you are not only assisting THA, but also promoting tourism within the Humboldt Bay region. Visitors from all over the world come to see the redwoods, and with a fully functioning Timber Heritage Museum and excursion train, they may stay another day or two.

Menu

Salad
Green salad
Rolls and butter

Choice of Entrees
Prime Rib
Swiss Chicken
Gluten-Free Vegetable Lasagna

Potatoes
Roasted red potatoes

Vegetable
Prince William vegetable medley

Dessert
Cheesecake

Coffee and tea

WHEN: Saturday, April 9, 2016. No host bar at 5:30 p.m., dinner at 6:30 p.m.

WHERE: The **Elks Lodge** at 445 Herrick Avenue in Eureka.

WHAT: A festive, fun dinner party. $50 per person or $400 for a reserved table of eight. There will be a silent auction before and during dinner, and a live auction following dinner. Rex Bohn will be the auctioneer.

ORDERING TICKETS OR DONATING: Complete the enclosed ticket order form and mail it with your check/money order to the **TIMBER HERITAGE ASSOCIATION, P.O. Box 6399, Eureka, CA 95502.** Orders can also be placed by phone with your credit card; at (707) 443-2957. Additional order forms can be printed from THA's website, www.timberheritage.org, or you can request that one be mailed to you by calling (707) 443-2957. Order early, reservations must be made by Thursday, April 7th.

Please join Michelle, me, and many other enthusiastic THA volunteers as THA once again hosts the Roundhouse Rendezvous. Thanks to THA friends and supporters, this event is THA's largest fundraiser and with your continued participation, it will keep on track. Finally, if you have not been out to the shops recently, please consider stopping by; the improvements are remarkable and the collection continues to grow.

On behalf of the Board and Planning Committee, thank you for your support.

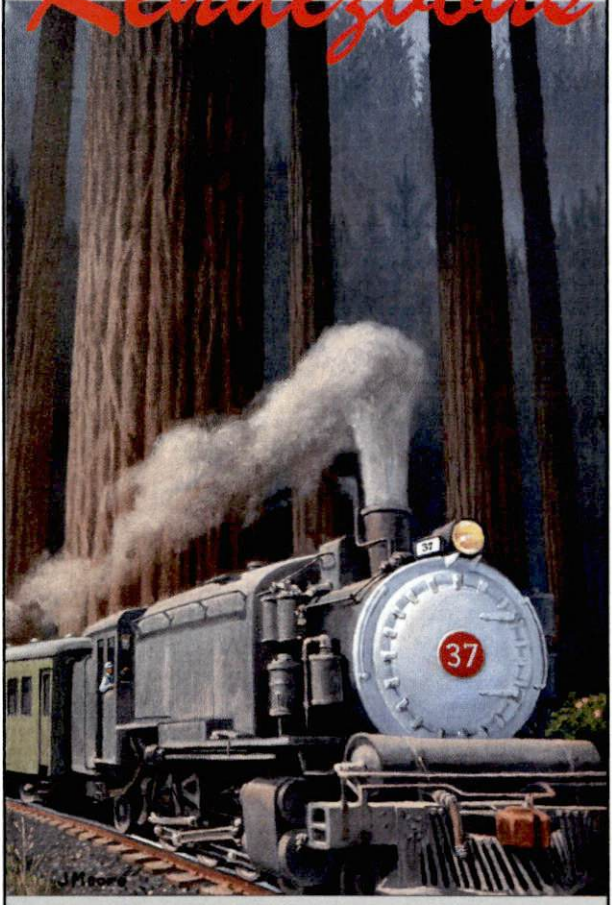
Sincerely,

Bruce L. Seivertson

Bruce Seivertson, President

The Timber Heritage Association Presents

Roundhouse *Rendezvous*



Dinner & Auction

Saturday, April 9, 2016

5:30 No-Host Bar & Silent Auction

Dinner served at 6:30 p.m.

Eureka Elks Lodge

TICKET ORDER FORM ON THE BACK

www.timberheritage.org

TICKET ORDER FORM

TIMBER HERITAGE ASSOCIATION

You're Invited To Attend Our Annual DINNER & AUCTION

ROUNDHOUSE RENDEZVOUS

Saturday, April 9th at Elks Lodge, 445 Herrick, EUREKA

Please reserve _____ tickets at $ 50 per person

Please reserve _____ tables(s) at $ 400 per table

_____ I am sorry that I will be unable to attend but have enclosed a donation*

Name _____

Address _____

Telephone No. _____ Amount enclosed $_____

Make checks payable to THA. To use your credit card or for questions call 443-2957.
Mail this order form and your check to THA, P.O. Box 6399, Eureka, CA 95502.
Tickets will be sent to you at the above address. Proceeds go towards preserving history including the 1893 Samoa Roundhouse.

*TIMBER HERITAGE ASSOCIATION IS A 501 (C) (3) NON-PROFIT CORPORATION. DONATIONS ARE TAX DEDUCTIBLE.

Crew & passenger cars at a busy roundhouse.

No-host bar at 5:30 p.m.
Dinner at 6:30 p.m.

DINNER MENU SELECTION

Indicate the number desiring each choice:

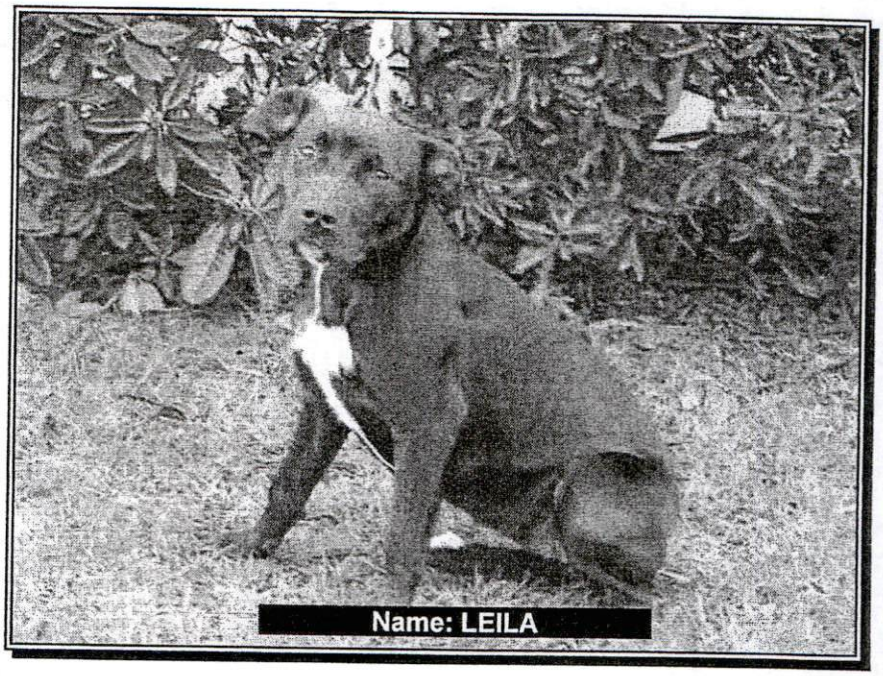
____ Prime Rib
____ Swiss Chicken
____ Gluten-Free Vegetable Lasagna

Humboldt County Sheriff's Office - Animal Control Shelter

Kennel No: DS06

Animal ID: A074016
Date of Birth: 05/31/2015
Breed: LABRADOR RETR / PIT BULL

Color: BLACK & WHITE
Sex: SPAYED FEMALE
Markings:
Available Date: 01/07/2016



Intake Information

Intake Date: 12/31/2015
Intake Time: 12:58 pm
Intake Type: STRAY
Intake Subtype: OTC
Hold? Not Yet

Notes: will pick up wed. 2/24

Intermediate Handler

Adopted!!

C:\Program Files\Chameleon Software\Chameleon\Crystal\KnCardPC.rpt

Memo No: M16-000135 Memo ID: A074016 Memo ID Type: ANIMAL_ID
Memo Date: 01/12/16 Memo Type: MEDICAL Memo Subtype:
Memo Text:
1/12/16 was taken to macc for vomiting in am after breakfast, would like to do plain diet for few days will be on meds vet said she seems fine running around being a happy puppy..If still vomiting they would like to do a x-ray. parvo test was neg

1/19/16 Took dog into MACC and saw Dr. Amsel because dog still vomits after eating. They did an x-ray and found a possible soft foreign object. They needed to do a barrum study so I authorized it. sj
1/21/16 I spoke to Dr. Schmall about this dog this morning and she said that the barrum study went great-everything passed through the intensines 100% which typically means that there is not a blockage. She said she is doing great on the mild/bland diet and I told her that she needed to be eating other food in order to go up for adoption because this vomitting thing did not start happening until AFTER her spay per the staff!! The vet said that she would start the dog on a couple of medications that should be fed with the regular diet. If dog continues to vomit or is showing other signs of illness, she said to contact her or to contact Dr. Amsel.

XXX

2/10/15 Poop sample came back negative
Memo LISTBOX:
MEMO_NO MEMO_DATE MEMO_TYPE MEMO_SUBTYPE MEMO_RESTRICTED

ARCATA ANIMAL HOSPITAL
1300 GIUNTOLI LANE
ARCATA CA 95521
707-822-2402

Merchant ID: 060002003
Term ID: 8888

Sale

MASTERCARD
XXXXXXXXXXXX3646
Entry Method: Swiped
Apprvd: Online Batch#: 000008
02/29/16 17:53:10

Inv#: 00000025 Appr Code: 05428P

K Total: $ 710.00
P
B

Customer Copy

THANK YOU

Arcata Animal Hospital
1300 Giuntoli Ln
Arcata, CA 95521
(707) 822-2402

Feb 29, 2016

Invoice Number 4313

Sex: Female Spayed
Age: 7 months old
Breed: Labrador Ret Mix
Coat Color: Black

DHPP vaccine: 12/31/2016
KENNELCOUGH ANNUAL: 12/31/2016
RABIES VACCINE: 01/08/2017
Examination - Sick/Injured: 02/25/2017

Date	Description	Qty		Price
02/29/2016	**Radiograph-First**	1.00	$	108.00
	Radiograph-Additional (Each)	1.00	$	56.00
	CBC/Chem - Stat In House	1.00	$	130.00
	Hospitalization Level 1	0.51	$	35.00
	Ultrasound - Abdominal	1.00	$	302.00
	Fluids, SQ (LRS) Over 200ML	1.00	$	44.00
	Office Call Progress Check	1.00	$	35.00
		Total for Lily:	$	710.00

Dr. Lisa Bartlett
Dr. Joy Fox-Beaudet

Total Invoice:	$	710.00
Previous Balance:	$	0.00
Total Amount Due:	$	710.00
MasterCard	$	710.00
Total Payments - Thank you:	$	710.00
New Balance Due:	$	0.00

ARCATA ANIMAL HOSPITAL
1300 GIUNTOLI LANE
ARCATA CA 95521
707-822-2402

Merchant ID: 660002003
Term ID: 8868

Sale

DEBIT
XXXXXXXXXXXX6728
Entry Method: Swiped
Apprvd: Online
Batch#: 000000
03/02/16
16:33:48
Debit Ref #: 993

Inv#: 00000018
Appr Code: 262405

Total: $ 1,760.89

Customer Copy

THANK YOU

Arcata Animal Hospital
1300 Giuntoli Ln
Arcata, CA 95521
(707) 822-2402

Mar 02, 2016

Invoice Number 4398

Sex: Female Spayed
Age: 8 months old
Breed: Labrador Ret Mix
Coat Color: Black

DHPP vaccine: 12/31/2016
KENNELCOUGH ANNUAL: 12/31/2016
RABIES VACCINE: 01/08/2017
Examination - Sick/Injured: 02/25/2017

Date	Description	Qty		Price
03/01/2016	**Hospitalization Level 2**	2.68	$	270.68
	E-Collars 7.5-30	1.00	$	15.25 +tx
	Anesthesia-Isoflurane	1.00	$	100.00
	Anesthesia Isoflurane Add'L	3.00	$	126.00
	Surgery Prep	1.00	$	28.00
	Exploratory Surgery	1.00	$	900.00
	Surgical Pack	1.00	$	48.00
	Hydromorphone Injection	2.00	$	64.00
	IV Catheterization	1.00	$	52.00
	Fluids, Intravenous	1.00	$	50.00
03/02/2016	**Fd: K9 Sci A/D Can Feline**	1.00	$	2.45 +tx
	Fd: K9 Sci I/D Canned Stew 5.5oz	1.00	$	1.81 +tx
	Tramadol 50 mg per pill	15.00	$	22.00
	Amoxicillin 250mg per cap	10.00	$	22.00
	Sucralfate 1G per tab	10.00	$	22.00
	Daily Exam, In-House	1.00	$	35.00

Total for Lily:	$	1,759.19
Total Products:	$	1,759.19
Sales Tax 1:	$	1.70
Total Invoice:	$	1,760.89
Previous Balance:	$	0.00
Total Amount Due:	$	1,760.89
Debit	$	1,760.89
Total Payments - Thank you:	$	1,760.89
New Balance Due:	$	0.00

Dr. Lisa Bartlett

RABIES VACCINATION CERTIFICATE FOR HUMBOLDT COUNTY, CALIFORNIA

DATE VACCINATED	VACCINATION EXPIRES	RABIES TAG NUMBER
1/08/2016	1/08/2017	161228

RABIES LOT NUMBER	RABIES MANUFACTURE
18273	MERIAL

OWNER: H.C.A.C.

PET NAME: A-074016

ADDRESS: 980 LYCOMING AVE.
MCKINLYVILLE, CA 95519

TELEPHONE: (707) 840-9132

SPECIES	SEX	AGE
CANINE	FS	6 mo

BREED	COLOR	MICROCHIP
Lab/Pit	Black/White	

I HEREBY CERTIFY THAT I HAVE VACCINATED THIS ANIMAL IN ACCORDANCE WITH THE COMPANY'S RECOMMENDATION FOR THE VACCINE USED ON THE ABOVE DATE.

DR. CATHY SCHMALL

MCKINELYVILLE ANIMAL CARE CENTER
2151 CENTRAL AVENUE
MCKINLEYVILLE, CA 95519
707-839-1504

March 18, 2016

Supervisor Virginia Bass
Board of Supervisors
County of Humboldt
825 5th Street, Room 111
Eureka, CA 95501

Dear Supervisor Bass,

Many of us attended a public meeting to learn about a Sanctuary Camp proposal presented by AHHA on March 7th. At that meeting someone in the audience brought up the Declaration of a Shelter Crisis in Humboldt County as a way of facilitating sheltering alternatives for the homeless. Our understanding from other public meetings which some of us have attended, and most of us have heard about, is that the Board of Supervisors has been asked a number of times by many different groups to put this item on their agenda. Supervisor Bohn was present at this meeting on the 7th and when asked why the Declaration of a Shelter Crisis has never been placed on the Board agenda, his response was that no one has ever asked that it be put on the agenda. We also learned at that time that for an item to be put on the agenda an individual supervisor must request that it be done.

Since your district is documented to have the largest number of houseless individuals in the county, and since we are residents of the Palco Marsh and registered voters in your district, we the undersigned are requesting that you place the Declaration of a Shelter Crisis in Humboldt County on your agenda as soon as possible. We are and have been in the midst of a severe shelter crisis.

We have known there is a lack of affordable housing, a lack of housing in general, and the quality of housing is something that we are all very concerned about. We have been living in a camp on toxic ground as an alternative to being arrested and we have no where to go. We now know that we are going to be made to leave the Palco Marsh on May 2nd. And while we applaud the city of Eureka for its effort to address this shelter crisis, and the county as well with resolving to pursue the Housing First Model and the newly adopted Homeless Strategy Implementation Plan, we wonder how the city and county will come to grips with modifying the "housing requirements" to be able to provide opportunities for us and all of those now without a secure place to call home, a space with a door that locks, walls that protect us and are sturdy, bathroom and kitchen - even if shared facilities with one's neighbors.

Please place the Declaration of a Shelter Crisis on the Board of Supervisor's agenda as soon as possible to address the housing crisis for those of us now living outdoors with no where else to go.

Sincerely,

Palco Marsh Residents

Marsh Residents

PRINT YOUR NAME on numbered line and THEN SIGN YOUR NAME below:

1. Veronica Hutchings
   Veronica Hutchings
2. ROCKY COLEMAN
   Rocky Coleman
3. [illegible]
4. Sean Hare
   [signature]
5. Cory Pontes
   Cory Pontes
6. William Harlow
   William Harlow
7. GENA DELGADO
   Gena Delgado
8. Willie L. Collins Jr
   [signature]
9. [illegible] ← LORA MILLIGAN
   [illegible] ← Lora Milligan
10. DAMON [illegible] ← TIERRA MILLIGAN
    [signature] ← Tierra Milligan

Marsh Residents

PRINT YOUR NAME on numbered line and THEN SIGN YOUR NAME below:

11. Marie Kinder
Marie [signature]

12. Alexander Gregory
Alexander Gregory

13. Patricia Dockstader
Pat Dockstader

14. Cleo Ladd
Cleo Ladd

15. Joseph Nastiuk
Joseph E. Nastiuk

16. Angeline Rainbolt — Angelina Rainbolt
Jack Sarter — JACK Sarter

17. Germanne Schulze
Germanne Schulze

18. Damon Wright
DAMON Wright

19. Sheila [illegible]
Sheila Hallin

20. [illegible signature]

21. Steven Shockley
[signature]

Marsh Residents

PRINT YOUR NAME on numbered line and THEN SIGN YOUR NAME below:

22. James Ruff II
James Ruff II

23. Tim Hatton
Tim Hatton

24. Andy Vaughan
Andy Vaughan

25. Shashone Nelson
Shashone Nelson

26. David Bagley
David Bagley

27. Katherine Campbell
Katherine Campbell

28.

29.

30.

31.

32.

Marsh Residents

PRINT YOUR NAME on numbered line and THEN SIGN YOUR NAME below:

33. Adam Garcia

34.

35.

36.

37.

38.

39.

40.

41.

42.

43.

HUMBOLDT BAY
HARBOR, RECREATION, AND CONSERVATION DISTRICT

(707) 443-0801
P.O. Box 1030
Eureka, California 95502-1030

They sent this to a few people.

NOTICE OF APPLICATION

TO WHOM IT MAY CONCERN:

Humboldt Bay Harbor, Recreation and Conservation District, P O Box 1030, Eureka, CA 95502 has applied for a permit from the Humboldt Bay Harbor, Recreation and Conservation District for the Fisherman's Channel Dredging and Beneficial Reuse Pilot Project.

The exact location and nature of the proposed project are on a map in a detailed report on file in the Humboldt Bay Harbor, Recreation and Conservation District office, 601 Startare Drive, Eureka, CA 95501.

Interested parties are invited to submit in writing any comments, objections or requests for a public hearing that they may have relative to the proposed activity to the Humboldt Bay Harbor, Recreation and Conservation District, P.O. Box 1030, Eureka, California 95502-1030. Written statements should be forwarded so as to reach this office no later than thirty (30) days from the date of this notice.

Adam Wagschal
Deputy Director
Humboldt Bay Harbor, Recreation
and Conservation District
P.O. Box 1030
Eureka, CA 95502-1030

01/19/2016

Humboldt Bay
Harbor, Recreation and Conservation District
(707) 443-0801
P.O. Box 1030
Eureka, California 95502-1030

To King Salmon Property Owners,

The Humboldt Bay Harbor District will host a public meeting on **Wednesday, March 2, 2016 at 6:00 pm** to discuss current and future plans for dredging the King Salmon Fisherman's Channel and private channels. The meeting will be held at the **Harbor District conference room on Woodley Island (601 Startare Drive, Eureka)**. Representatives from the Harbor District and PG&E will provide a presentation regarding the project and will be available to answer questions. We hope you can attend the meeting.

Thank you,

Jack Crider
Executive Director

AGREEMENT FOR DREDGING AND TRANSFER OF FISHERMAN'S CHANNEL

This Agreement For Dredging and Transfer of Fisherman's Channel ("Agreement") is made and entered into effective as of the date (the "Effective Date") countersigned by Pacific Gas and Electric Company, a California corporation ("PG&E"), and Humboldt Bay Harbor, Recreation and Conservation District, a California public entity ("District" and collectively with PG&E, the "Parties" and each a "Party"), in consideration of the covenants hereinafter set forth.

RECITALS:

A. PG&E owns certain real property surrounding its Humboldt Bay Power Plant located in Humboldt County, California. This Agreement pertains to a portion of such property commonly known as the Fisherman's Channel, and lands southwesterly of King Salmon Avenue (collectively, the "Subject Property") more particularly described in Exhibit A-1 and depicted for illustrative purposes only in Exhibit A-2, which are attached hereto and incorporated herein by this reference.

B. Fisherman's Channel had been utilized by PG&E for many years as the once through cooling water source for the Humboldt Bay Power Plant, which is being decommissioned. PG&E no longer requires a cooling water source for its Humboldt Bay Power operations and desires to return the depth of Fisherman's Channel to a depth adequate for reasonably anticipated use by dredging and disposal of the dredging materials. PG&E represents and warrants it has no on-going contractual commitment or regulatory permit condition requirement for the permanent maintenance of the channel depth of Fisherman's Channel.

C. The District is committed to the operation and maintenance of navigable waters in the Humboldt Bay and desires to acquire dredging equipment that would allow it to perform dredging on its own behalf without the need to hire out of the area dredging contractors. The District, if it owned such equipment, would undertake the PG&E planned one-time dredging of Fisherman's Channel and reuse of dredged material in lieu of disposal when possible.

D. The Parties wish to memorialize the mutual agreement under which PG&E would fund the District's dredging and repair of the Fisherman's Channel, and upon obtaining all necessary governmental approvals, for PG&E to convey the Subject Property to the District together with any and all improvements, fixtures, water and minerals located thereon and any and all rights appurtenant thereto, all on the terms and conditions set forth in this Agreement.

AGREEMENTS

NOW, THEREFORE, in consideration of the foregoing recitals which are specifically incorporated into the body of this Agreement, the mutual promises contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Permitting.

a. PG&E shall prepare all documents and engineering assessments that are needed for permit(s) from any regulatory agency with jurisdiction to be issued to the District for the

3. Conveyance of the Subject Property.

a. PG&E shall convey, and the District shall accept, all PG&E's right, title and interest to the Subject Property as generally depicted in Exhibit A-2 within ninety (90) days following the satisfaction of the conditions precedent set forth below associated with obtaining all applicable local land use entitlements and the approval of the California Public Utilities Commission for the transfer the Subject Property. The Subject Property shall be conveyed by deed through an escrow to be opened by PG&E through the escrow office of Fidelity National Title Insurance Company, 404 H. Street, Eureka, CA 95501. Escrow fees, documentary transfer tax and recording fees shall be paid by the District. The District agrees to cooperate in executing and performing such escrow instructions as may be required by Fidelity National Title Insurance Company. PG&E shall provide to District a preliminary title report issued by Fidelity National Tile Insurance Company. Title to the Subject Property shall be free and clear of all liens and encumbrances, save and except for taxes and assessments not yet delinquent and such easements or other encumbrances disclosed on a preliminary title report issued by Fidelity National Title Insurance Company. The District may elect to purchase title insurance, with such endorsements as the District may choose, at the District's sole cost.

b. The conveyance of the Subject Project shall be conditioned upon the following conditions precedent:

(i) The Subject Property must comply with the California Subdivision Map Act ("Map Act") (Government Code Section 66410, et seq.) ("Map Act Compliance"). The conveyance shall be conditioned upon confirmation of Map Act Compliance or determination that conveyance of the Subject Property to the District as contemplated in this Agreement is exempt from the Map Act. PG&E shall be responsible for all applications and expenses incurred in obtaining Map Act Compliance. In no event shall PG&E be required to assume any condition, burden, dedication, requirement or restriction on any development or use of the Subject Property or the obligation to pay any exaction, fee, cost, expense or other monetary obligation not approved in writing by PG&E.

(ii) PG&E has obtained approvals from the California Public Utilities Commission ("CPUC") that may be required by any laws, rules or regulations for the transactions contemplated by this Agreement upon terms and conditions acceptable to PG&E in PG&E's sole discretion ("CPUC Approval"). PG&E agrees to use its commercially reasonable efforts to obtain CPUC Approval. The District acknowledges that PG&E makes no representation or warranty with respect to CPUC Approval, and waives all claims against PG&E which may arise out of losses, expenses or damages suffered or incurred by the District as a result of the failure of the CPUC to approve the transfer of the Subject Property to the District as contemplated by this Agreement.

c. The Subject Property shall be conveyed with no warranties of title and subject to all matters affecting the Subject Property whether of record or not which would be disclosed by a current, accurate survey of the Subject Property. **THE DISTRICT ACCEPTS ITS INTEREST IN THE SUBJECT PROPERTY IN AN "AS-IS WITH ALL FAULTS" BASIS WITH ANY AND ALL PATENT AND LATENT DEFECTS, IS NOT RELYING ON AND HEREBY WAIVES ANY WARRANTY OF MERCHANTABILITY, HABITATBILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY OTHER REPRESENTATION OR**

WARRANTIES, EXPRESS OR IMPLIED, OR ANY KIND WHATSOEVER FROM PG&E WITH RESPECT TO THE MATTERS CONCERNING THE SUBJECT PROPERTY, including, but not limited to the physical condition of the Subject Property; zoning status; the presence of any hazardous substances, wetlands, cultural resources in, on or under the Subject Property.

d. PG&E has multiple legal parcels in the area, and the District as a public agency is exempt from some provisions of the Map Act, and the parties contemplate that compliance with the Map Act can be accomplished by the creation of a new parcel or by restructuring one of the existing PG&E parcels by way of lot line adjustment in order to convey the Subject Property. However, if the conveyance of the Subject Property in fee by a separate parcel is not possible or feasible, PG&E shall convey to District a navigation easement for public use for the Fisherman's Channel.

e. PG&E and the District each warrant and represent to the other that it has not retained, nor is it obligated to, any person or entity for brokerage, finder's or similar services in connection with the transactions contemplated by this Agreement, and that no commission, finder's fee or other brokerage or agent's compensation can be properly claimed by any person or entity based upon the acts of such party with regard to the transactions which are the subject matter of this Agreement.

4. Following the conveyance of the Subject Property, the District shall exempt PG&E from any special Improvement District that may be formed to support future maintenance of the Fisherman's Channel or the Fingers. The property rights to any real property retained by PG&E shall not include a right to use the Fisherman's Channel or the Fingers absent an agreement by PG&E to participate in any special Improvement District that may be formed to support future maintenance of the Fisherman's Channel or the Fingers. The District shall provide PG&E with access to the Subject Property in connection with any soil and water sampling that may be necessary in connection with PG&E's plant closure under the terms of a mutually acceptable right of entry agreement.

5. PG&E and the District agree to execute such additional documents and take such additional actions which are consistent with, and as may be reasonable and necessary to carry out the provisions of, this Agreement.

6. This Agreement is personal to the District, and the District shall not assign, or otherwise transfer this Agreement or any interest herein. Any assignment, or other transfer violating the requirements of this Section shall be voidable at PG&E's election, and, at the option of PG&E, shall constitute a default hereunder.

7. Neither Party shall be held responsible for the failure or delay in performance herein where such failure or delay is due to any act of God or of the public enemy, war, compliance with laws, governmental acts or regulations, fire, flood, epidemic, strikes and labor interruption, accident, unusually severe weather or other causes similar to the foregoing beyond their reasonable control, including without limitation the failure to obtain permits, consents or similar approvals relating to the dredging and repair activity or the land use entitlements contemplated by this Agreement. Any Party whose performance is affected by such force majeure shall promptly give notice to the other Party of the occurrence of circumstance of force majeure upon which it intends to rely to excuse its performance. If the circumstances of force majeure affect the other Party's performance herein or

delays performance for more than eighteen (18) months, then the other Party may terminate this Agreement upon fifteen (15) days advance written notice.

8. Any notices, requests or elections herein required or permitted shall be deemed given upon receipt and effective as to delivery if given in writing, and may be sent by registered United States Mail (return receipt requested) or by electronic mail or facsimile (with confirmed receipt) or by personal delivery or delivery by a nationally recognized courier service, addressed as follows or to such subsequent address as may be provided by Party to the other Party by proper notice:

If to the District:

Jack Crider
Chief Executive Officer
Humboldt Bay Harbor, Recreation and Conservation District
601 Startare Dr.
Eureka, CA 95501

If to PG&E:

Loren Sharp
Senior Director/HBPP Plant Manager
Humboldt Bay Nuclear Power Plant
1000 King Salmon Ave.
Eureka, CA 95503

9. This Agreement, its validity, construction and all rights under it shall be governed by the laws of the State of California and without reference to the choice of law principles of the State of California or any other state. Any action or legal proceeding arising out of this Agreement shall be brought and maintained in Humboldt County, California.

10. The District and PG&E agree that the terms and provisions of this Agreement embody their mutual intent and that such terms and provisions are not to be more liberally in favor of, or more strictly against, either Party.

11. This Agreement, together with its attached exhibits, contains the entire Agreement between the Parties with respect to the subject matter hereof, and any prior or contemporaneous agreements, discussions or understandings, written or oral, are superseded by this Agreement and shall be of no force or effect. No addition or modification of any term or provision of this Agreement shall be effective unless set forth in writing and signed by each of the Parties.

12. IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, INCLUDING LOST PROFITS, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHERWISE, AND WHETHER OR NOT SUCH DAMAGES WERE FORESEEN OR UNFORESEEN.

13. Neither this Agreement nor any agreements or transactions contemplated hereby shall be interpreted as creating any partnership, joint venture, association or other relationship between the Parties.

14. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument. Each Party shall be entitled to rely upon executed copies of this Agreement transmitted either by facsimile or a pdf version by email to the same and full extent as the originals.

IN WITNESS WHEREOF, the District and PG&E have caused this Agreement to be executed as of the Effective Date by their respective representatives thereunto duly authorized.

DISTRICT:

Humboldt Bay Harbor, Recreation and Conservation District

By: _____ Jack Crider
Tillamook bay Astoria

Title: CEO

Date: 3/6/14

PG&E:

Pacific Gas and Electric Company

By: _____

Title: ~~Senior Director~~ / HBPP Plant Manager

Date: 2/27/14

Exhibit A-1
(Legal Description)

All of the real property described in the deed from Eureka Shipbuilders, Inc. to Pacific Gas and Electric Company dated February 8, 1952, and recorded in Book 197 of Official records at page 379, Humboldt County Records; excepting therefrom the following three (3) parcels of land:

(1) All portions of land lying to the north and to the east of the southerly line of the parcel of land described in the deed from Pacific Gas and Electric Company to County of Humboldt dated July 20, 1954, and recorded in Book 302 of Official Records at page 481, Humboldt County Records.

(2) Any portion of lands lying within the Map of King Salmon Resort dated July 13, 1948, and recorded in Book 12 of Maps at page 58, Humboldt County Records.

(3) Any portion of lands lying within the parcel of land described in the deed from Pacific Gas and Electric Company to County of Humboldt dated December 16, 1988, and recorded in Book 1989 of Official Records at page 8410, Humboldt County Records.

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Exhibit A-2
(Depiction of Subject Property
to be transferred to the District).

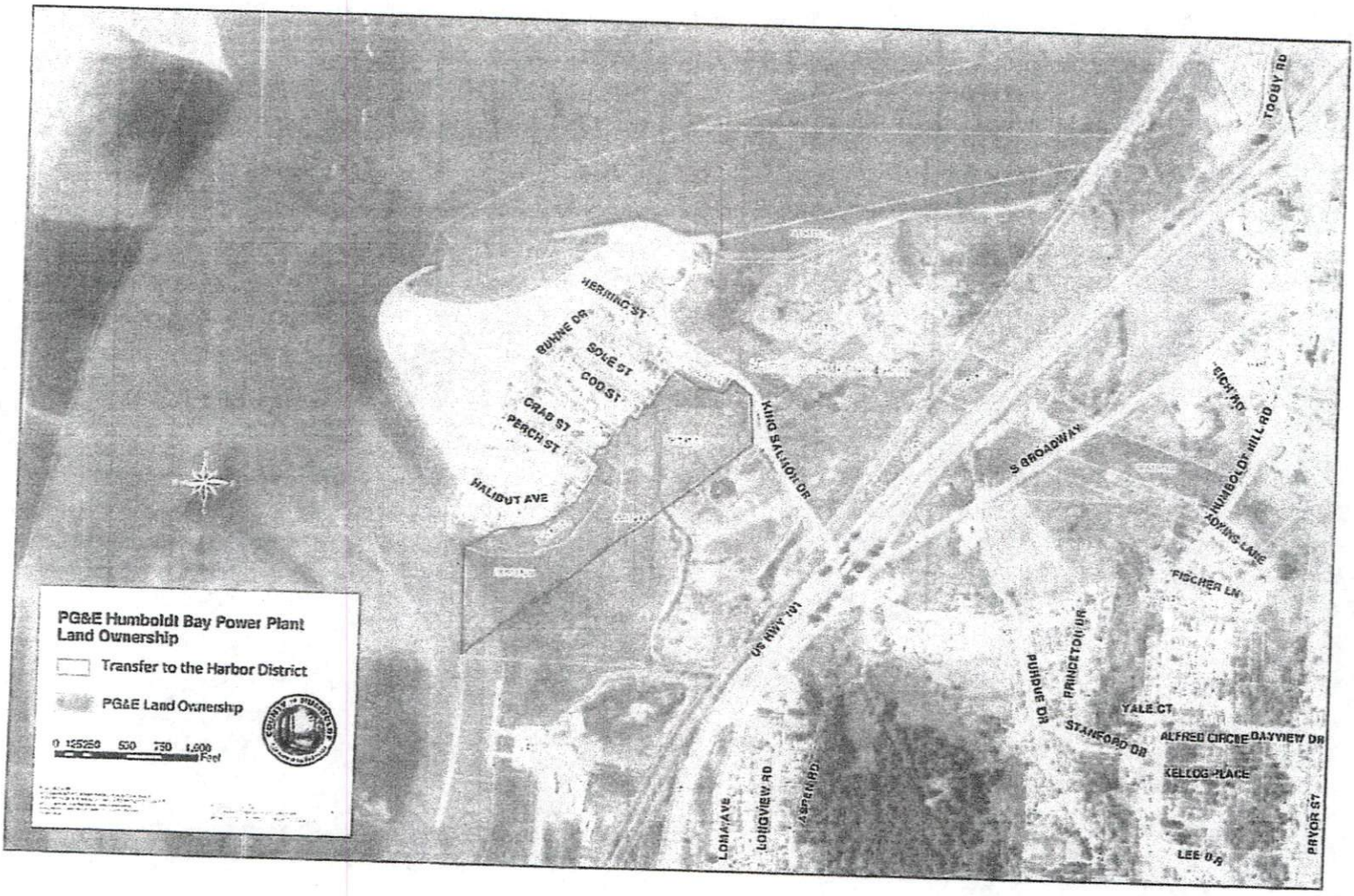


Figure 10-1a. Eelgrass in Arcata Bay, 2000. (Note: North is to left.)

South Humboldt Bay Eelgrass Distribution 2004

This map shows eelgrass distribution in South Humboldt Bay in October 2004. Eelgrass is displayed in green on the map.

General Information:
Eelgrass distribution was derived from interpretation of hyperspectral aerial imagery funded by CICORE and the Humboldt Bay Harbor, Recreation and Conservation District (metadata). Accuracy was assessed at .925. The map is displayed in UTM NAD83.

Figure 10-1b. Eelgrass in South Bay, 2004. (Note: North is to left.)

South Humboldt Bay Eelgrass Distribution 2004

This map shows eelgrass distribution in South Humboldt Bay in October 2004. Eelgrass is displayed in green on the map.

General Information:
Eelgrass distribution was derived from interpretation of hyperspectral aerial imagery funded by CICORE and the Humboldt Bay Harbor, Recreation and Conservation District (metadata). Accuracy was assessed at .925. The map is displayed in UTM NAD83.

Figure 10-1b. Eelgrass in South Bay, 2004. (Note: North is to left.)

Project Description/Application Supplement

Fisherman's Channel Dredging

and

Beneficial Reuse Pilot Project

Humboldt Bay Harbor,
Recreation and Conservation District

Humboldt County, California

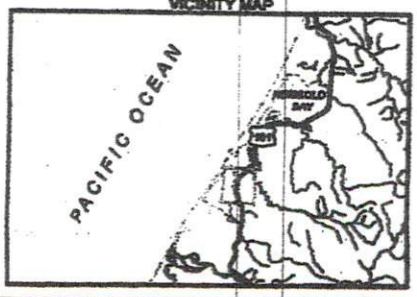
January 2016

ISM	Incremental Sampling Methodology
m	meters
MCL	Maximum Contaminant Levels
mi	miles
MLLW	mean lower low water
MND	Mitigated Negative Declaration
NAAQS	National Ambient Air Quality Standards
NCRA	North Coast Rail Authority
NCUAQMD	North Coast Unified Air Quality Management District
NCRWQCB	North Coast Regional Water Quality Control Board
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
PAH	polycyclic aromatic hydrocarbons
NO_2	nitrogen dioxide
PG&E	Pacific Gas and Electric Company
PM10	particulate matter with aerodynamic diameter less than or equal to 10 microns
PM2.5	particulate matter with aerodynamic diameter less than or equal to 2.5 microns
ppm	parts per million
RSL	Response Screening Level
RWQCB	Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
SE	State Endangered
SO_2	sulfur dioxide
SQuiRTs	Screening Quick Reference Tables
SSC	Species of Special Concern
ST	State Threatened
SWPPP	stormwater pollution prevention plan
TAC	toxic air contaminants
US 101	U.S. Highway 101
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	U.S. Geological Survey
WSTWRP	White Slough Tidal Wetlands Restoration Project
yd^3	cubic yard

Acronyms and Abbreviations

°C	degrees Celsius
°F	degrees Fahrenheit
AB	Assembly Bill
ac	acre
AE	Agriculture Exclusive
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCA	California Coastal Act
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COC	constituents of concern
CR	Commercial Recreation
CRPR	California Rare Plant Rank
DPS	Distinct Population Segment
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
ft	feet
FSC	Federal species of concern
FT	Federally threatened
fps	feet per second
GHG	greenhouse gas
Harbor District	Humboldt Bay Harbor, Recreation, and Conservation District
HBHRCD	Humboldt Bay Harbor, Recreation, and Conservation District
HBGS	Humboldt Bay Generating Station
HBPP	Humboldt Bay Power Plant
HBNWR	Humboldt Bay National Wildlife Refuge
ISFSI	Independent Spent Fuel Storage Installation

VICINITY MAP



LEGEND

PROJECT AREA

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FIGURE 1-1
Location Map
Fishermen's Channel Dredging and Beneficial Reuse Pilot Project
Humboldt Bay Harbor, Recreation and Conservation District, Eureka, California

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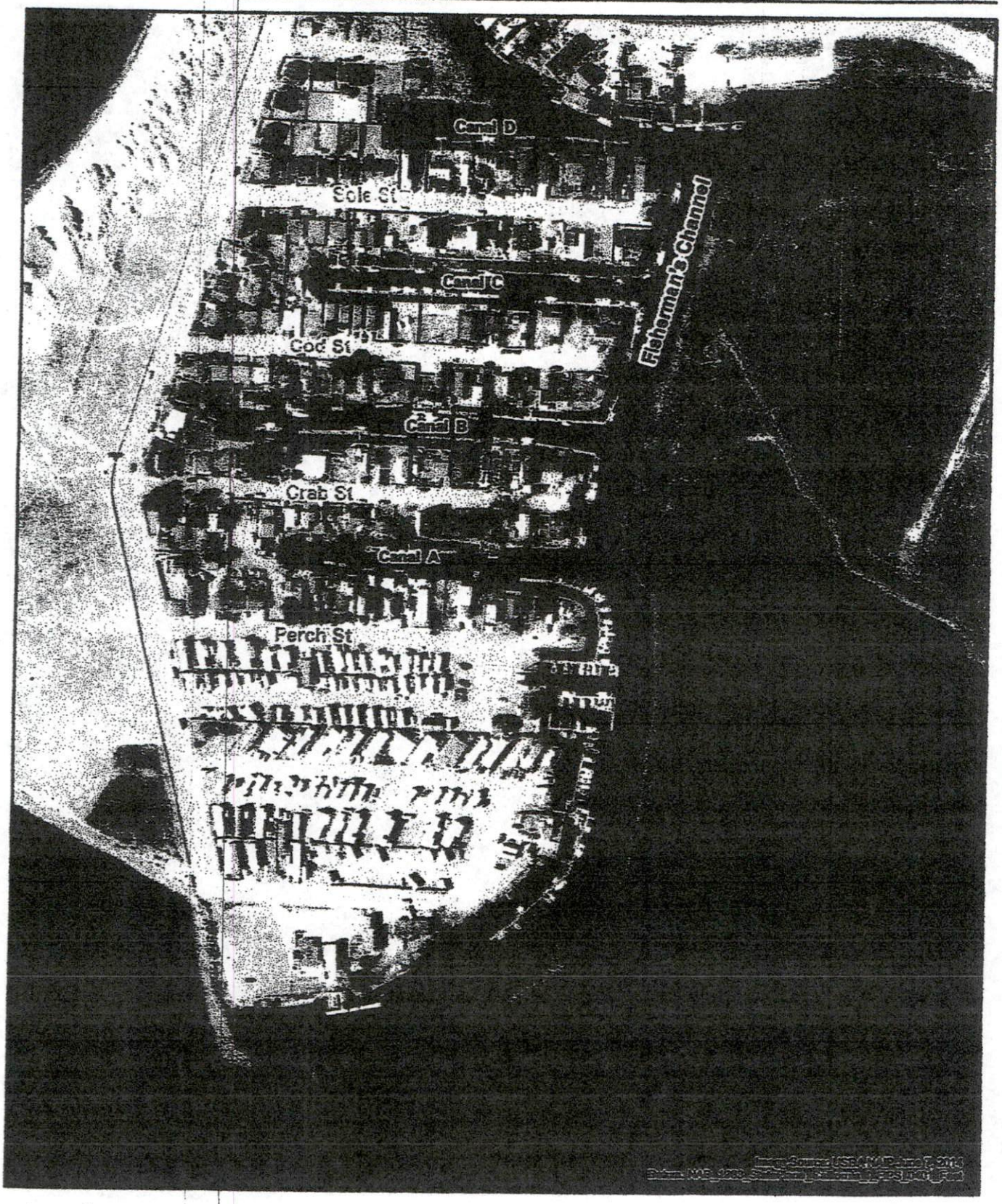

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Fisherman's Channel Dredge Area

-6 MLLW Dredge Area

-3 MLLW Dredge Area

FIGURE 1-2
Fisherman's Channel Dredge Site
Fisherman's Channel Dredging and Beneficial Reuse Pilot Project
Humboldt Bay Harbor, Recreation and Conservation District, Eureka, California

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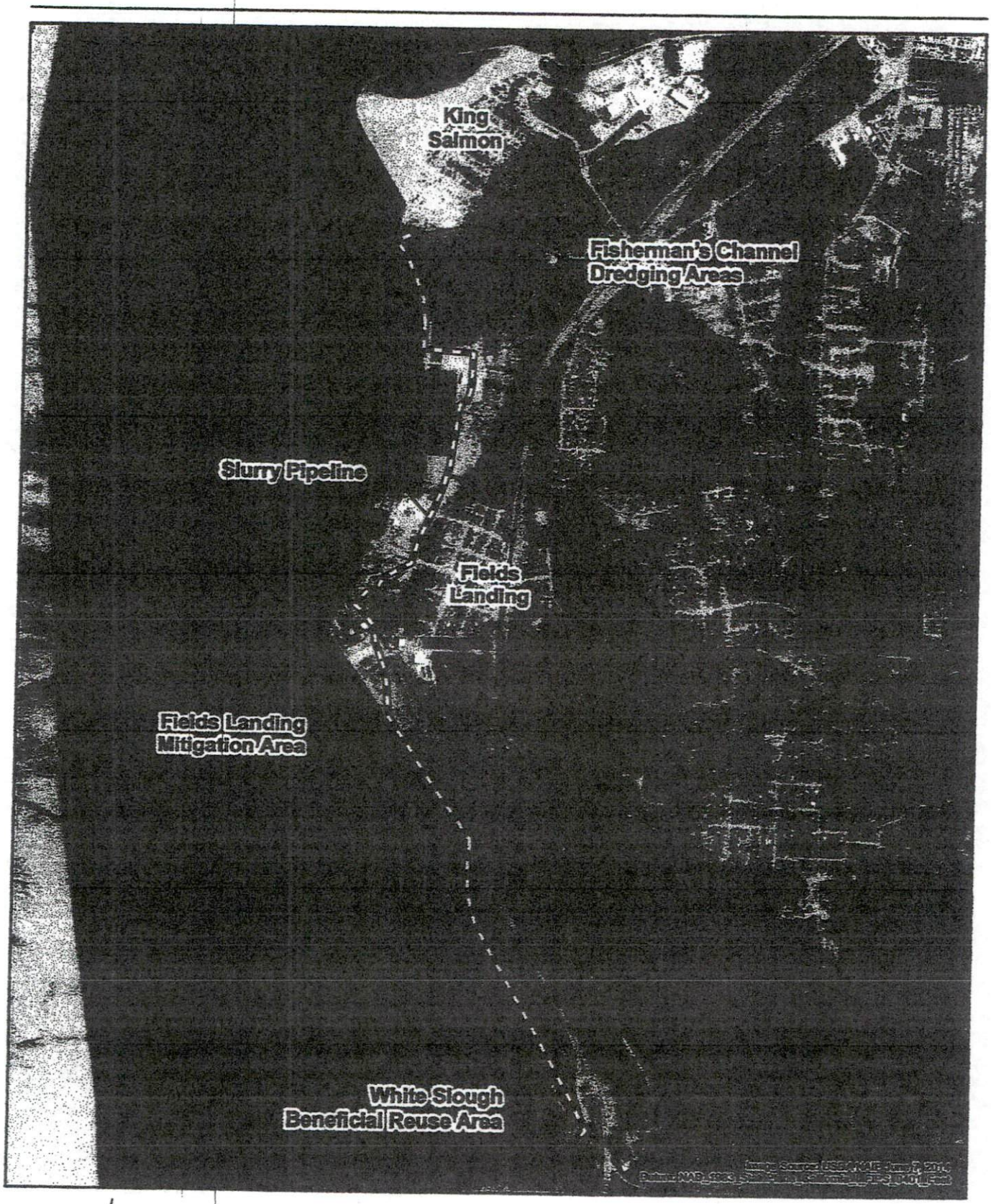

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PROJECT AREA

SLURRY PIPELINE ROUTE

FIGURE 1-3
Slurry Pipeline Route to White Slough
Fisherman's Channel Dredging and Beneficial Reuse Pilot Project
Humboldt Bay Harbor, Recreation and Conservation District, Eureka, California

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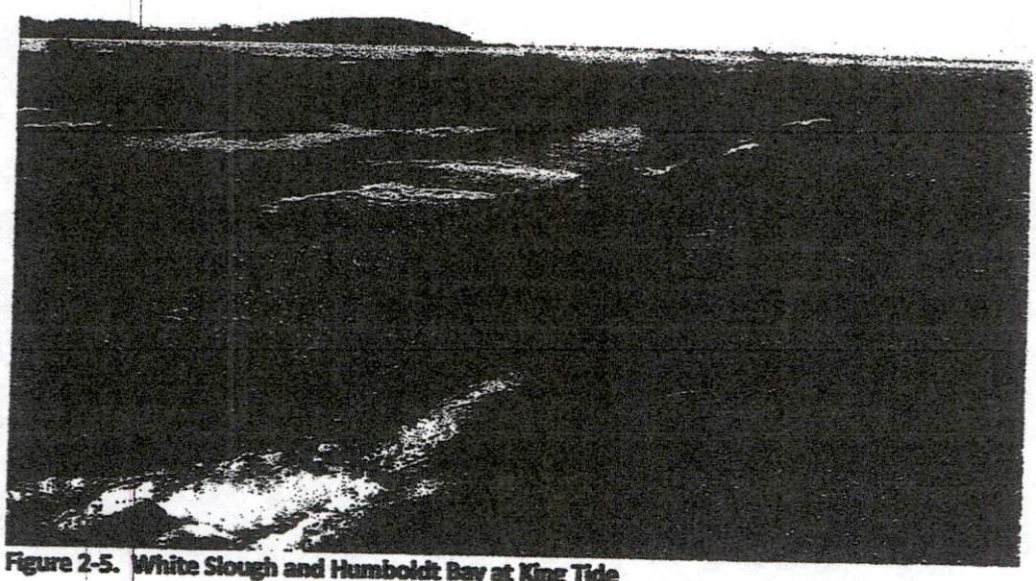

Figure 2-5. White Slough and Humboldt Bay at King Tide

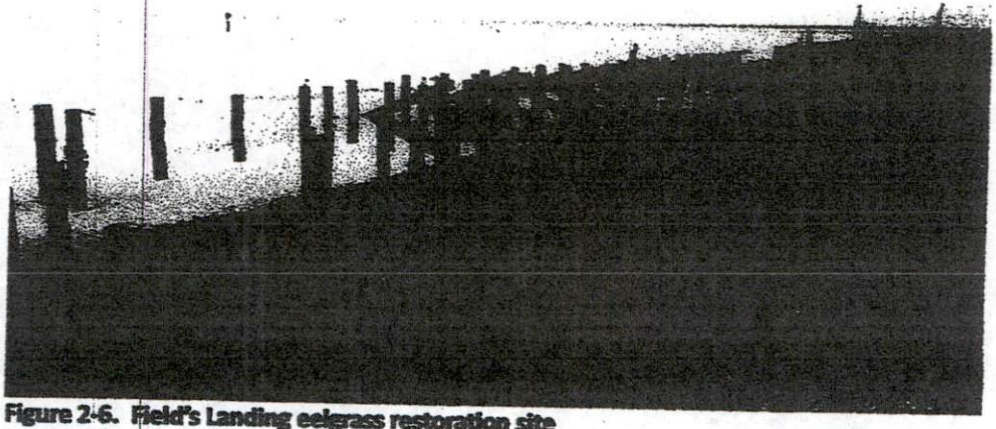

Figure 2-6. Field's Landing eelgrass restoration site

Figure 2-3. Slurry pipeline route along railroad right-of-way

Figure 2-4. Beneficial Reuse Site, Humboldt Bay National Wildlife Refuge, White Slough Unit

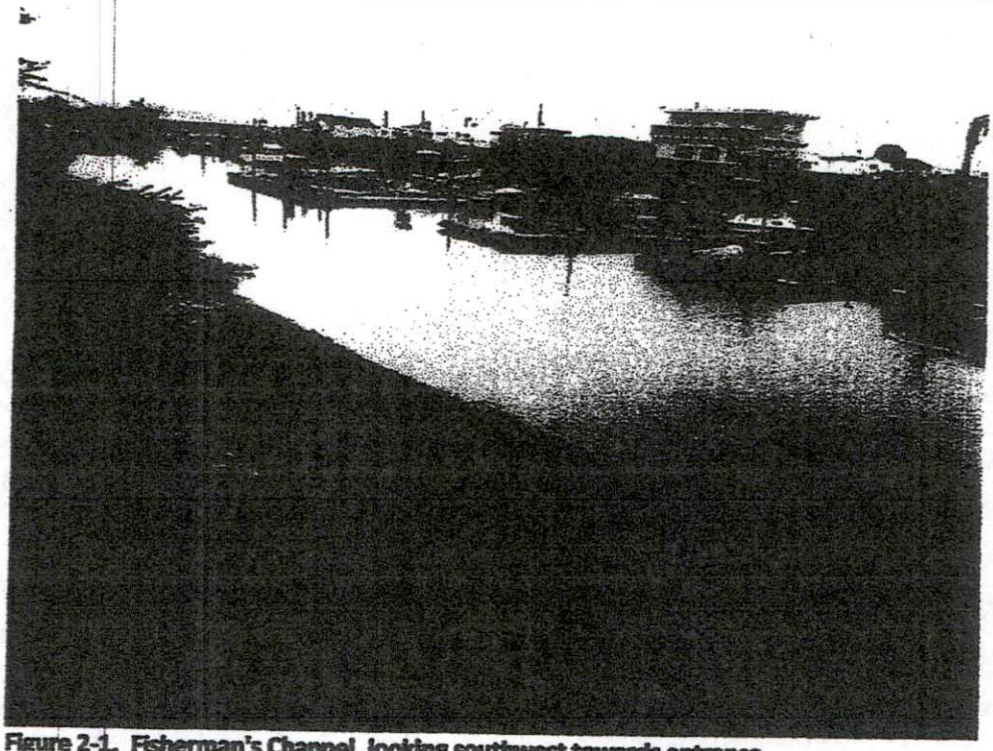

Figure 2-1. Fisherman's Channel, looking southwest towards entrance

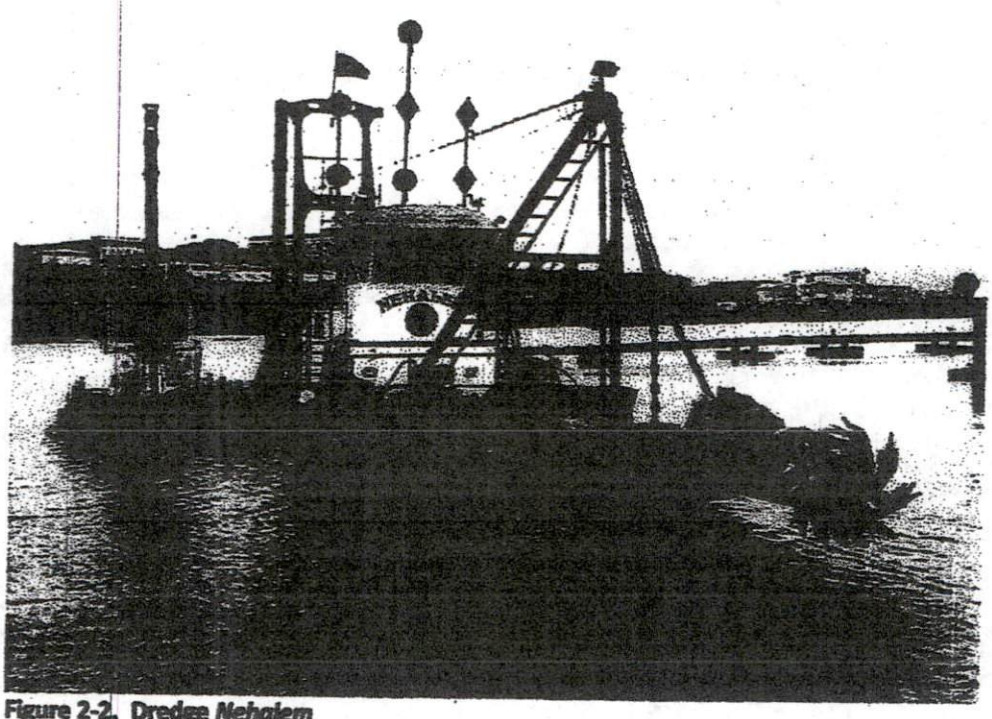

Figure 2-2. Dredge *Nehalem*

SECTION 1

Project Information

1. Project Title:

   Fisherman's Channel Dredging and Beneficial Reuse Pilot Project

2. **Lead Agency Name and Address:**

   Adam Wagschal, Deputy Director
   Humboldt Bay Harbor, Recreation and Conservation District (Harbor District)
   601 Startare Drive
   Eureka, CA 95502-1030
   707-443-0801
   awagschal@humboldtbay.org

   Contact Person and Phone Number:

   Adam Wagschal, Deputy Director, Harbor District
   (707) 443-0801

3. **Project Location:**

   The Fisherman's Channel dredging site is approximately 2.5 miles southwest of Eureka, California (see Figures 1-1 and 1-2 [figures appear at the end of the section in which they are first referenced]). The Fisherman's Channel is owned by the Harbor District. The project area is located in Sections 7, 8, 17 and 18 of Township 4 North, Range 1 West, of the Fields Landing, California, U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle.

4. The White Slough beneficial reuse site (Figure 1-3) is located on the Humboldt Bay National Wildlife Refuge approximately 5 miles south of Eureka in Section 29 of Township 4 North, Range 1 West, of the Fields Landing quadrangle.

5. **General Plan Designation:**

   The General Plan designation for the Fisherman's Channel dredging site is Resource Dependent / Industrial Coastal Dependent (MR/MC).

   The General Plan designation for the White Slough beneficial reuse site is Agriculture Exclusive (AE).

   The General Plan designations for the dredge slurry pipeline alignment, which will extend from Fisherman's Channel to White Slough, are Resource Dependent/Commercial Recreation (MR/CR), Natural Resources (NR), Industrial / Coastal Dependent (MC), and (Railroad).

   The General Plan designations for the Fields Landing eelgrass mitigation site are Industrial/Coastal Dependent (MC) and Natural Resources (NR).

6. **Zoning:**

   The zoning districts for the Fisherman's Channel dredging site are Commercial Recreation (CR) with Coastal Resource Dependent (C), Flood Hazard (F), and Coastal Wetland (W) combining districts.

   The zoning districts for the White Slough beneficial reuse site are Agriculture Exclusive, minimum lot size 60 acres (AE/60) with Coastal Wetland (W), Design Review (D), Flood Hazard (F), Streams and Riparian Corridor Protection (R), and Transitional Agricultural Lands (T) combining districts.

The zoning districts for the dredge slurry pipeline alignment are Commercial Recreation (CR) with Coastal Resource Dependent (C), Coastal Wetlands (W) and Flood Hazard Areas (F) combining districts, Natural Resources (NR) with Coastal Wetlands (W) combining district, Industrial Coastal Dependent (MC), Industrial Coastal Dependent (MC) with Natural Resource (NR) and Coastal Wetland (W) combining districts, (Railroad), and Agriculture Exclusive, minimum lot size 60 acres (AE/60) with Coastal Wetland (W), Design Review (D), Flood Hazard (F), Streams and Riparian Corridor Protection (R), and Transitional Agricultural Lands (T) combining districts.

The zoning districts for the Fields Landing eelgrass mitigation site are Industrial Coastal Dependent (MC) and Industrial Coastal Dependent (MC) with Natural Resource (NR) and Coastal Wetland (W) combining districts.

7. **Description of Project:**

Currently, Fisherman's Channel is inaccessible to larger vessels at a lower low tide due to a bar that has formed at the channel entrance. Dredging the mouth of Fisherman's Channel and the main channel are proposed to take place as one project to facilitate improved navigation in the channel and beneficial reuse of dredged sediment at the White Sough receiving site. This project involves four components:

- Dredging of the Fisherman's Channel.
- Transfer of dredge sediment through a pipeline to the White Slough Unit of the Humboldt Bay National Wildlife Refuge (Refuge).
- Placement and dewatering of the dredge material at the White Slough Unit. The Refuge White Slough Tidal Wetlands Restoration Project is fully permitted, including the deposition of sediments for beneficial reuse. Once the sediments are placed at the White Slough Unit and dewatered, the Refuge will determine and implement their disposition for ecosystem restoration.
- Eelgrass habitat restoration mitigation program at Fields Landing that involves removal of abandoned pier pilings and gravels to create suitable habitat conditions for eelgrass colonization.

For a detailed project description, see Section 2, Project Description and Appendix A, Site Plans.

8. **Surrounding Land Uses and Setting:**

The dredge pipeline passes through industrial land and along a railroad line surrounded by wetlands.

The White Slough beneficial reuse area is located within the Refuge. Humboldt Bay is located to the north and west. Marshlands of the Refuge are located to the south and U.S. Highway 101 and upland areas beyond are to the east.

The Fields Landing restoration project is adjacent to a property owned by the Harbor District, which consists of a boat yard and open space.

9. **Other Public Agencies Whose Approval Is Required (for example, permits, financing approval, or participation agreement):**

Participating agencies and their required authorizations will include the following:

TABLE 1-1
Summary of Anticipated Approvals and Permits

Agency	Permit/Approval	Notes
Humboldt Bay Harbor, Recreation, and Conservation District (Harbor District)	Harbor District Permit	Lead agency for California Environmental Quality Act compliance.

TABLE 1-1
Summary of Anticipated Approvals and Permits

Agency	Permit/Approval	Notes
California Coastal Commission (CCC)	Coastal Development Permit	CCC serves as the primary state-level permitting agency in the Coastal Zone within Retained Jurisdiction Areas.
U.S. Army Corps of Engineers (USACE)	Rivers and Harbors Act Section 10 Dredging permit	Dredging in Waters of the US*
North Coastal Regional Water Quality Control Board	Section 401 Water Quality Certification, construction storm water permit	Required for wastewater discharges to surface water or land.
National Marine Fisheries Service (NMFS)	Endangered Species Act Incidental Take Authorization	USACE will consult with this agency to determine whether or not a permit to 'take' listed anadromous or marine species is needed
NMFS	Essential Fish Habitat Assessment	USACE will consult with this agency to determine whether or not the project will adversely affect Essential Fish Habitat
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act Incidental Take Authorization	USACE will consult with this agency to determine whether or not a permit to 'take' the endangered tidewater goby is needed.
California Department of Fish and Wildlife (CDFW)	California Endangered Species Act Incidental Take Permit	For potential incidental take of longfin smelt (*Spirinchus thaleichthys*)
Humboldt County Building Department	Conditional Use Permit and Coastal Development permit under the Local Coastal Plan (cooperative permit with CCC in their retained jurisdiction)	To install slurry pipeline in the AE or NR zoning district.
Humboldt Bay National Wildlife Refuge (Refuge)	Memorandum of Agreement	Agreement between the USFWS and Harbor District for cooperative beneficial reuse of sediments at the White Slough Unit
North Coast Rail Authority (NCRA)	Encroachment permit	Access to railroad right-of-way for slurry pipeline route.

*Note: Deposition of dredged sediments at the Refuge is covered by the Refuge's Clean Water Act Section 404 permit for their White Slough Tidal Wetlands Restoration Project.

SECTION 2

Project Description

Maintenance dredging in Humboldt Bay is vital to maintaining safe and navigable access. The Harbor District participates in dredging outside of the federally dredged channels within the Bay. The Harbor District manages several Humboldt Bay channels that connect communities, support commercial fishing, enhance recreational access, and provide access to docks.

The Harbor District is the proponent for the proposed Fisherman's Channel Dredging and Beneficial Reuse Pilot Project in Humboldt Bay, California. Fisherman's Channel is located in King Salmon, California, approximately three miles south of the City of Eureka along Humboldt Bay (Figure 1-1). Fisherman's Channel is currently inaccessible to larger vessels at lower low tide due to a sandbar that has formed at the channel entrance. The areas to be dredged are shown in Figure 1-2.

Dredging the mouth and main channel of Fisherman's Channel will facilitate improved navigation in the channel and beneficial reuse of dredged sediment at the Refuge White Slough Unit receiving site. The sediment is needed at the White Slough site to restore historic elevations that supported tidal salt marsh habitat and will be conveyed to White Slough via a temporary slurry pipeline connecting Fisherman's Channel with White Slough that runs mostly along roadways and an abandoned railroad line.

The project also includes, as a mitigation measure for the dredging project's effects on eelgrass habitat, an eelgrass restoration component. New eelgrass habitat will be created by removal of dilapidated former pier pilings and cobbles and gravel substrate near the Harbor District's Fields Landing Boat Yard.

Dredging activities for the King Salmon residential canals that connect with the Fisherman's Channel are not part of this project because the feasibility, funding, and timeline for dredging the residential canals are unknown at this time.

2.1 Project Purpose and Scope

This project is configured as a pilot project for future dredging and beneficial reuse projects in Humboldt Bay. It provides an opportunity to use the Harbor District's recently acquired and retrofitted dredge to remove accumulated sediments from Fishermen's Channel and beneficially reuse the sediments for salt marsh restoration at Refuge. Lessons learned from completion of this project will inform future dredging and beneficial reuse projects within Humboldt Bay.

2.1.1 Project Objectives

Project objectives:

- Dredge the Fisherman's Channel to restore safe and consistent boat navigation at all tidal heights
- Provide dredged material to the White Sough Unit of the Refuge for beneficial reuse by the USFWS for salt marsh restoration
- Carryout a pilot project for future dredging operations to provide regulatory agencies with information that will facilitate future dredge and beneficial reuse design, permitting, and implementation elsewhere in Humboldt Bay
- Conduct water quality monitoring that will guide future dredging operations elsewhere within Humboldt Bay
- Implement and monitor success of eelgrass (*Zostera marina*) and longfin smelt (*Spirinchus thaleichthys*) mitigation

- Establish an acceptable standard protocol for sediment sampling methods and analysis for future dredging to focus on Constituents of Concern (COC) and possibly reduce redundancy in sampling suites
- Provide Harbor District staff with dredging and beneficial reuse experience particularly to address boat navigation, habitat restoration and sea level rise issues within Humboldt Bay
- Inform a Humboldt Bay Sediment Master Plan

2.1.2 Background

Fisherman's Channel and the King Salmon Residential Canals were created in 1947 by dredging in an existing sand spit extending south of Buhne Hill. In 1952, PG&E purchased the property that is now the Humboldt Bay Power Plant (HBPP) and constructed a cooling water intake canal as an extension of the Fisherman's Channel. PG&E also took ownership of the Fisherman's Channel at that time.

The Fisherman's Channel was historically maintained by PG&E through routine maintenance dredging. The last maintenance dredging was done in 1982, removing 21,000 cubic yards of sediment. The intake canal is no longer used by PG&E since the HBPP ceased operations in 2010. The new Humboldt Bay Generating Station (HBGS), which replaced HBPP's electrical generation, does not require water from the intake canal for cooling. Since the last dredging event, sediment has accumulated in Fisherman's Channel, hindering navigation.

2.2 Project Elements

This project involves four major components, which are discussed in turn below:

- Dredging of the Fisherman's Channel
- Transfer of dredge sediment through a slurry pipeline to the White Slough Unit of the Refuge for beneficial reuse
- Placement and dewatering of the dredge material at White Slough
- Eelgrass habitat restoration mitigation program at Fields Landing involving removal of dilapidated former pier pilings and cobbles and gravels to create suitable habitat for eelgrass colonization, and shoreline stabilization after piling and cobble removal

2.2.1 Fisherman's Channel Dredging

This section describes the Fisherman's Channel Dredging site, discusses a sampling and analysis program carried out to determine the suitability of the dredged materials for beneficial reuse at White Slough, and the dredging equipment and process.

2.2.1.1 Fisherman's Channel Dredging Site

Fisherman's Channel is located in King Salmon, California, approximately 2.5 miles south of the City of Eureka along Humboldt Bay (Figure 1-1). Access from the residential docks in King Salmon to Humboldt Bay is by way of Fisherman's Channel. It is approximately 2,625 feet from the Fisherman's Channel entrance to the eastern King Salmon Avenue Bridge where the channel transitions to the intake canal leading to the former HBPP. Side canals extend from the northwest side of the main channel to allow access to resident's docks and properties. Fisherman's Channel and the residential canals are subject to the tides. The community of King Salmon, for the most part defined by the residential canals, supports a mixture of residential, light commercial, and industrial development.

The Fisherman's Channel entrance is adjacent to Fields Landing Channel in Humboldt Bay. The entrance is protected by a rock breakwater to the north and a wooden breakwater to the south. Missing, damaged and deteriorated materials on the wooden breakwater were recently repaired/replaced by the Harbor District.

The *Gill's by the Bay* restaurant dock facility is located inside the northern bank of the channel entrance. There are numerous private dock facilities along the northwestern bank of the channel (Figure 2-1). The southeastern bank is a narrow vegetated levee/breakwater. The main channel provides access to the residential canals.

The residential canals are lined with private dock facilities and surrounded by houses. The residential canals may be dredged as a separate future project whereby the King Salmon community may be the project proponent. Schedule, funding for implementation, and design details are unknown at this time and, therefore, it is not part of the proposed project.

2.2.1.2 Sampling and Analysis for Beneficial Reuse

In preparation for planned maintenance dredging of Fisherman's Channel, the sediment proposed for dredging was sampled and analytically tested, according to a final approved *Workplan for Sediment Sampling and Analysis (SAP) Prior to Dredging* (GHD 2012). The purpose of the sampling was to determine whether contaminants are present in the material to be dredged, in order to determine compatibility with the proposed White Slough receiving site.

The sampling and analysis methods originally proposed and submitted for regulatory agency approval are detailed in the 2012 Workplan. The sediment sampling results were summarized and discussed in the *Report of Findings Sediment Sampling and Analysis Fisherman's Channel* (GHD 2013). Additional sediment sampling and analysis was performed between September 21 and September 28, 2015 to implement the Incremental Sampling Methodology (ISM), at the request of the NCRWQCB.

Sediment quality/composition results from the Fisherman's Channel were compared to baseline conditions documented utilizing ISM at the Refuge White Slough receiving site. Per consultation with the NCRWQCB, a *Workplan for Fisherman's Channel Dredge Sediment Sampling for Beneficial Reuse* was prepared (GHD 2015). Sampling was conducted as follows:

> Thirty (30) soil samples from the dredge area with three replicates per the ISM protocol, analyzed for total constituents listed in the Workplan. (A subsample of sediment collected from ISM was submitted for benthic testing lab analysis).

Sampling Results

The Report of Findings of the 2015 Workplan presents laboratory results and statistical analysis of the ISM sampling program. Soil sediment results were compared to White Slough ISM baseline conditions as well as to United States Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs), or residential Regional Screening Levels (RSLs). Results were compared to National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables (SQuiRTs) for marine sediments to document evaluation of potential risks from contaminated sediment and provide a basis for determining the need to also conduct benthic organism testing.

The 2015 Report of Findings concludes that the proposed Fisherman's Channel dredge sediments are suitable for beneficial reuse at the White Slough restoration area. This finding is based on statistical comparison of Fisherman's Channel ISM sediment sampling results with White Slough baseline concentrations and benthic acute toxicity testing. A summary of sediment characterization, based on the ISM sampling follows; and is discussed in detail in the Report of Findings.

- Benthic analysis indicates that the Fisherman's Channel sediment samples are not acutely toxic to amphipods or polychaetes.
- Laboratory analysis of ISM samples indicates that the following constituent concentrations either are above the USEPA Residential RSLs: arsenic, cobalt, vanadium and that the following have the potential to be above RSLs (where laboratory reporting limits were not achievable to match the respective RSLs):

  - Toxaphene samples were non-detect. Laboratory detection limit was 0.66 milligram per kilogram (mg/kg) which is above the residential RSL of 0.49 mg/kg.
  - Benzo(a)pyrene and dibenz(a,h)anthracene samples were non-detect. Laboratory detection limits of 0.058 mg/kg and 0.061 mg/kg were above the residential RSLs of 0.0016 mg/kg for benzo(a)pyrene and 0.016 mg/kg for dibenz(a,h)anthracene.
  - PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260 samples were non-detect. Laboratory detection limits of 0.32 mg/kg and 0.33 mg/kg were above the residential RSLs for PCBs which range from 0.12 mg/kg (PCB-1254) to 0.23 mg/kg (PCB-1242 and PCB-1248).
- Of the above constituents, the value for Benzo(a)pyrene exceeds the White Slough baseline; however, benthic analysis confirmed that this constituent does not pose acute toxicity to benthic organisms.
- Leachability analysis for metals and polyaromatic hydrocarbons (PAHs) indicates concentrations below the NCRWQCB Water Quality Objectives (WQOs) for Bays and Estuaries with the following exceptions:
  - Arsenic (FC-Replicates 1, 2, and 3)
  - PAHs- benzo(a)anthracene, benzo(a)pyrene, benzo(b)flouranthene, benzo(k) flouranthene, chrysene, and dibenz(a,h)anthracene
- Due to the low potential human exposure to soil or sediment containing dioxins, PAHs, PCBs, arsenic, cobalt, and vanadium from the reuse of Fisherman's Channel sediments for wetland restoration at White Slough, inhalation, ingestion, and direct contact exposure to recreational users is not likely.
- Constituent concentrations that exceeded the Residential RSLs for the 2015 Fisherman's Channel ISM samples were similar to those reported for the 2013 samples collected from the channel.
- Statistical analysis of White Slough and Fisherman's Channel concentrations identified one constituent (cobalt) where Fisherman's Channel concentrations were higher than White Slough concentrations, and the 95UCL results indicated that the Fisherman's Channel data were above the applicable water quality standard. In each of the other constituents, concentrations reported in White Slough replicates were either higher than, or no different from, those observed in Fisherman's Channel replicates, or were below the water quality standards considered. The Fisherman's Channel value of 11 parts per million (ppm) for cobalt is slightly higher than the values ranging between 7.8 ppm and 8.6 ppm reported for White Slough.

Suitability for Beneficial Reuse

On December 2, 2015, NCRWQCB Staff conveyed that from their regulatory perspective, the sediment characterized is suitable for beneficial reuse at the White Slough Unit at the Refuge. This finding was based on the NCRWCB's review of the ISM Report of Findings for Fisherman's Channel sediment sampling and analysis results. Specifically, NCRWQCB Staff (e-mail from Gil Falcone) indicated:

> In accordance with Attachment 1 of the Humboldt Bay National Wildlife Refuge – White Slough Restoration Project 401 Water Quality Certification, our analysis of the Report of Findings identified constituent levels that are slightly elevated higher than the baseline of ISM sampled soils at White slough include: Metals (Barium, Cadmium and Cobalt), PCP, and a number of PAHs. All of the elevated constituents were additionally analyzed to ascertain what, if any soluble concentrations might leach out of the sediment if placed at White Slough and potentially impact Bay and Estuary Waters. Analysis of the results of the Di-WET test for these constituents show that none are expected to be elevated above Water Quality Objectives for Bays and Estuaries. Though Dioxin levels of some congeners within the sediments found at Fisherman's' Channel were slightly different populations than those at White Slough, of critical interest 2,3,7,8 TCDD TEQ was nearly identical at both sites and not likely mobile. Further, the sediment exposure toxicity test results showed no significant acute toxicity to benthic marine organisms representative of sensitive ecological receptor

species for what will become salt marsh habitat. This satisfies an important narrative Water Quality Objective to maintain water free of toxic substances in concentrations that are toxic to human, plant, animal or aquatic life.

The White Slough receiving site will become primarily waters of the US, so in this situation it is of most importance to the Regional Water Board to look at these results with respect to White Slough receiving site constituent levels, Bay and Estuary Water Quality Objectives, constituent mobility and toxicity rather than RSLs.

2.2.1.3 Dredging Process

Hydraulic dredging is the most appropriate method for the Fisherman's Channel sediment removal, based upon site-specific characteristics that include substrate type, water quality, site bathymetry, tidal influences, dredging depth, desired dredging rate (i.e., cubic yards per hour), disposal method, disposal site location, and levels of COC.

The project dredging plan is to remove two sediment shoals—one located just outside and one located just inside the mouth of Fisherman's Channel—and additional areas within the main channel. The two shoals at the entrance are proposed to be dredged to -8 feet MLLW because sediments have accumulated at that location more rapidly than in other areas of Fisherman's Channel. The main channel dredge depth will be to the slightly higher depth of -6 feet MLLW, which will minimize impacts on eelgrass, provide bottom depths conducive to recolonization by eelgrass, and reduce dredge sediment volume while providing an adequate depth for boat movement. Eelgrass impacts and mitigation are summarized below and discussed in detail in Appendix B, the Eelgrass Mitigation Plan. Based on survey data from 2012 and accounting for additional material that has accumulated in the channel since then, it is anticipated that a total of approximately 4,150 cubic yards of sediment will be removed from Fisherman's Channel.

The Harbor District's hydraulic dredge *Nehalem* (Figure 2-2) uses a cutter head attached to a 12-inch hydraulic pipeline. A cutter head is a mechanical device that has rotating blades or teeth to break up or loosen the bottom material so that it can be suctioned through the dredge. Cutter head-pipeline dredges work best in areas where the cutter head is buried in the sediment. The dredge has onboard pumps that suction material through the intake pipe, and push it out to the discharge pipeline. Because cutter head-pipeline dredges pump directly to pipeline, they can operate continuously and more efficiently than other types of dredges and can complete the dredging operation in a shorter period of time. This minimizes disruption to the marine environment.

The Harbor District dredge, its support boat, *Barfly*, and sediment transport pipes, will be moved into position from their location at the Fields Landing Boat Yard. The dredge will be anchored near the channel entrance, where the cutter head will be lowered into position for dredging. The dredge will move along the length of the channel to complete the main channel dredging.

2.2.2 Dredge Slurry Pipeline

Sediment from the dredging of Fisherman's Channel will be pumped through a pipe that will transport the sediment slurry approximately 2.3 miles to the White Slough North Basin beneficial reuse area, partly along an abandoned railroad right-of-way (Figures 1-3 and 2-3). Dredged material will be transported from the *Nehelem* through a 12-inch-diameter pipe made of durable plastic material (styrene-rubber 17). The pipe will be floated above the water surface for approximately 0.2 miles (the floats are 2'x 4'x 8' plywood boxes with Styrofoam interiors). Approximately 10 floats will be attached to the pipeline and anchored in the bay using five 11"x 24"x 40" anchors (two floats per anchor). The pipeline will come onto land over an existing dock and then extend 0.75 miles along the side of an existing private roadway and cross Railroad Avenue before reaching the Fields Landing Boat Yard. At the Boat Yard, a 12-inch Thomas Simplicity booster pump will be placed in the line. From the Boat Yard, the pipe will extend another 0.5 miles along an old roadway

on Harbor District property and then 0.7 miles along an abandoned railroad track (Figure 2-3) to the White Slough receiving site. Some removal of vegetation along the railroad right-of-way will be necessary to allow pipeline passage.

A 5-foot buffer on either side of the pipeline will be subject to vegetation control as needed to provide access for installation and maintenance during dredging activities. Placement of the pipe will involve fusing two to three 40-foot pipe sections together, placing them along the alignment, and clamping these longer pipeline sections together. Workers will use trucks, a bobcat and necessary fusing equipment to install and connect the pipeline from the dredge to the receiving site. A winch may be used to pull the pipeline into place where access is limited due to dense vegetation. A portion of the receiving cell will be designated for equipment staging at White Slough. Mobilization will take approximately seven to ten days.

2.2.3 White Slough Beneficial Reuse Site

Dredged materials from Fisherman's Channel will be placed for beneficial reuse in the White Slough Unit, which is located in the south-eastern region of Humboldt Bay within the Refuge. The dredged material will be used as part of the White Slough Tidal Wetlands Restoration Project (WSTWRP), which will restore tidal salt marsh in an area that consists of diked former salt marsh. These diked baylands have compacted by as much as three feet due to the oxidation of organics from the former salt marsh soil during a former period of dewatering and agricultural use. The restoration plan involves the placement by the HBNWR of fill to raise the elevation of the diked wetlands by more than three feet, and then re-establishing full tidal inundation to enable the passive re-establishment of salt marsh vegetation. Tidal channels will also be maintained or created within the restoration area to restore tidal flow. The WSTWRP specifically identifies dredged materials as one of several fill material sources that are appropriate for use in the restoration of salt marsh, as long as contaminate levels meet the standards set by the NCRWQCB for White Slough. As described above, Fisherman's Channel sediments have been sampled and analyzed per NCRWQCB protocols and found to meet the criteria for reuse at White Slough. The WSTWRP is a project of the USFWS HBNWR and the restoration activities, including the addition of fill from external projects such as the Fisherman's Channel Dredging Project, have been authorized in the USFWS permits for the project.

The White Slough Unit is composed of three sub-units. The proposed use of Fisherman's Channel dredged materials will take place in the western sub-unit, the site of the tidal wetlands restoration project. This sub-unit has been physically sub-divided into three basins, and the Refuge will place the Fisherman's Channel dredged materials in the North Basin. The North Basin is approximately 8.4 acres in size and is adjacent to Humboldt Bay (Figure 2-4). An actively eroding earthen dike that ranges in elevation from 8.0 to 9.5 feet separates the North Basin from the Bay. As illustrated in Figure 2-5, the White Slough Unit is in need of sediments to raise the elevation of the area to protect tidal wetlands from levee failure and future sea level rise. The dredging and beneficial reuse project will help to meet this objective.

The Refuge has constructed a "tidal ridge" inland from the diked shoreline to ensure that, should the perimeter dike breach, the remainder of the Basin will not be prematurely tidally inundated. It ranges in elevation from 8 to 9 feet and is currently being used for vehicular access. A naturally occurring upland area forms the northeastern boundary of the North Basin. The North Basin has the remnants of an in-board ditch and former slough channel that drain the Basin to the south. A tide gate drains the Basin to the Bay.

The restoration plan for the North Basin will involve placing fill to design elevations to support salt marsh vegetation while retaining existing drainage channels, reducing the elevation of the perimeter dike to 8 feet, removing the tide gate, and breaching the dike to restore full tidal flow to the Basin (see Appendix A for engineering drawings of the beneficial reuse/restoration area). The Basin will contain both salt marsh habitat and an inter-tidal channel network. The restoration of salt marsh habitat will provide benefits for fish and wildlife, flood protection, and shoreline protection for U.S. Highway 101, as well as allowing for increased carbon sequestration in restored salt marshes. Placement of the dredged material in the north

Basin as a sub-layer that will be covered by other imported soils will help facilitate meeting one of the Project's objectives.

The area in the North Basin that will be used to deposit sediment is approximately 2.5 acres. Daily dredging operations will produce approximately 1,400 cubic yards of slurry sediment material per hour. At 6 hours of operation per day, 8,400 cubic yards of sediment slurry will be transported to White Slough per day, which will result in 840 cubic yards of dredged sediment per day. At this discharge rate the depth of the slurry could reach 2.1 feet.

When dredged material is initially placed in the North Basin, it will occupy approximately 2.5 acre-feet because of the high water content. The settling process will occur over time by percolation and evaporation, with the sediment eventually consolidating as it dries. The dredged sediment containment area will be sized so as to contain both the original volume of sediment to be dredged and water transported during dredging and placement. The size of the containment will be sufficient to cause the sediment to form a shallow sheet of dried sediment. The existing ground in the area naturally slopes to the south and water from the dredged material will flow south towards a constructed containment berm approximately 4.5 feet tall. The location and orientation of the containment berm and silt fences will avoid existing drainage channels in the North Basin.

As the slurry flows to the west and south, the partially permeable containment berm will retain sediment in suspension while allowing water to percolate through. The berm will be constructed of #3 rock (1-inch to 2.5-inches in diameter) and will be approximately 240 feet long and 4 feet in height (360 cubic yards of rock). The berm will be located to avoid existing wetted channels in the North Basin. A 25-foot section near the center of the berm will be lined with a permeable filter fabric, through which the water will pass. The remainder of the berm facing the deposition area (215 linear feet) will be lined and impermeable. Gravels in the containment berm will be beneficially reused as base layer for future sediment deposition at the Refuge after the project is complete.

A series of six wire-backed silt fences west of the berm will further filter the water before it reaches the existing drainage channels in the North Basin that drain via a tide gate to the Bay (See Appendix A). The silt fences will be of increasingly finer mesh further from the berm, and will be arrayed in a series, 15 feet apart, downslope of the berm, to gradually filter the discharge from the deposition area. The filtered slurry water will drain through vegetated areas and discharge to the Bay via a tide gate. Turbidity will be monitored periodically to ensure sufficient sediment removal. If necessary, additional silt fences will be installed.

The dredged material will be deposited in the receiving site through a grizzly screen to remove debris and refuse. The grizzly screens will be made of inclined metal bars spaced 2-3 inches apart. The slurry will pour onto the top of the rack and debris will slide down to the bottom for collection. The debris will be collected by hand and placed in a bin for proper disposal. Temporary orange construction fencing may be placed around the perimeter of the receiving site to exclude public access.

A series of pipes and couplings will be used to create a section of articulated pipe that will increase the angle of movement. The flexible couplings will allow the pipe to be relocated side to side approximately 60 degrees. The relocation of the terminal end of the pipe will be performed using an excavator or other appropriate piece of earthwork equipment. Relocation of the slurry pipe will allow dredging material to be deposited more uniformly. Any excess sediment buildup in the area of the pipe outfall will be leveled using a bulldozer or excavator. If necessary, the pipe outfall area will be dressed with rock slope protection to reduce scouring from the dredge sediments. The water and sediment slurry will be distributed evenly across the receiving site due to the high water content of the slurry mix (90:10 ratio approximately). Water placed in the North Basin will percolate into the ground, evaporate, or discharge through a 24-inch-diameter tide gate to the Bay.

Monitoring will be conducted during the dredging, transport, placement, and dewatering operations and the dredging rate adjusted, as needed, to ensure an effective rate of placement and dewatering at the reuse site. Based on preliminary filtration estimates, a majority of the water will infiltrate through the constructed berm and silt fences overnight, prior to the next day's dredging.

A Bobcat or dozer may be used to spread out material once it has dewatered a sufficient amount. Dredging the channel entrance and main channel will take approximately two weeks (14 days). The silt fences will be removed at the end of the project.

2.2.4 Eelgrass Habitat Restoration

Portions of the Fisherman's Channel have been colonized by eelgrass, which is a "Habitat Area of Particular Concern" under the Magnuson-Stevens Fishery Conservation and Management Act and a "species of special biological significance" pursuant to the California Coastal Act. Eelgrass serves as rearing habitat for estuarine species, including listed species such as longfin smelt. Dredging will disrupt eelgrass habitat and so the project's impacts to eelgrass will require mitigation.

2.2.4.1 Overview

Dredging activities for this project will result in the loss of 1.2 acres of eelgrass habitat in the Fisherman's Channel. The eelgrass mitigation program described in detail in Appendix B will restore approximately 1.44 acres of eelgrass habitat at the HBHRCD's Fields Landing Boat Yard property (mitigation ratio of 1.2:1). The project's eelgrass mitigation plan involves the removal of dilapidated former pier pilings and cobble and gravel fill material at the site of an abandoned saw mill located adjacent to the HBHRCD's property in Fields Landing, about a mile south-southwest of Fisherman's Channel. With the removal of the pilings and substrate, eelgrass will naturally recolonize this area. The eelgrass mitigation program will thus increase the quality and quantity of rearing habitat for listed estuarine species, including longfin smelt. These habitat improvements will result in higher quality rearing conditions, more cover from predators, and increased survival rates over the current condition. Increased survival rates will help with the recovery of populations of this species. The increased habitat area and survival rates will fully mitigate for the very low risk of take associated with the project.

The eelgrass restoration area is the site of a former dock that was part of a saw mill located on the HBHRCD's Fields Landing property. The saw mill and the top deck of the dock have been removed, leaving the pilings in the bay and approximately 2 to 3 ft of eroded gravel/cobble fill that was deposited on top of the native clay soil layer along the shoreline. The eelgrass restoration program involves removing approximately 500 dilapidated pilings and excavating approximately 4,600 yd^3 of gravel/cobble fill over a 1.44-area in the vicinity of the Fields Landing Boat Yard (Figure 2-6). The pilings and gravel/cobble fill on the site limit the available growing space for eelgrass and the pilings limit the amount of sunlight available to the eelgrass that is currently growing at the edge of the mitigation area. Removing the closely-spaced pilings and gravel/cobble will increase the available habitat for eelgrass and improve growing conditions for the existing eelgrass. Removing the pilings, which may have been treated with creosote, will also remove a source of potential water quality contamination from Humboldt Bay.

2.2.4.2 Piling Removal Methods

To remove the pilings, a vibratory hammer will be mounted on a land-based crane that will operate from the shoreline, per USEPA (2007) guidelines. The operation requires using the vibratory hammer break the skin friction bond between the piling and adjacent sediments to facilitate removal. Once the piling has been pulled out, it will be placed in a contained storage site on the Fields Landing property prior to disposal at a landfill that is licensed to handle possible creosote-contaminated waste. Piling removal will take place at low tide and a turbidity curtain will be placed outside the pilings, both of which will minimize the production and dispersal of turbid water.

If the entire piling cannot be removed with the vibratory hammer (i.e., the piling breaks off or is already broken), then it will be cut below the mud line using a pneumatic underwater chainsaw or shears. Pilings that are exposed at low tide and not within eelgrass beds may be excavated 1 to 2 ft below the sediment surface and cutoff with a hydraulic saw or shears. The pilings will be cut off at the mud line if the mud line is subtidal, to minimize disturbance of the sediment, and pilings in intertidal areas will be cut off at least one foot below the mud line where the work can be accomplished during periods of low tide.

2.2.4.3 Gravel and Cobble Substrate Removal Methods

Once the pilings are removed, an excavator will remove approximately 1,400 linear feet of cobble and gravel fill to create conditions favorable to eelgrass colonization. The excavation area is between the pilings to be removed and the shore. This area is currently covered with gravel/cobble fill that has eroded from adjacent uplands and covered the original clay and bay mud layers. This fill material was originally used to create the base for a former sawmill operation. The excavation area will be lowered in a two-step process to reach an elevation of -1.0 to 0 ft MLLW to create the conditions suitable for natural eelgrass recolonization. Excavation will occur during low tidal cycles to eliminate potential excavation-related direct impacts on coho salmon and longfin smelt.

An estimated 4,600 cubic yards of material will be removed using an excavator positioned on the top of the bank. The sediment will be placed in a truck and moved to a different part of the HBHRCD Fields Landing property for storage or some other use on the site. Potential uses may include improvements to the existing road, shoreline stabilization, and/or leveling of non-wetland areas on the property. Erosion control BMPs will be implemented to minimize movement of sediment and/or water into wetlands and waters of the state.

The excavator will then be used to remove the bay mud/clay to elevations conducive for eelgrass recolonization. Sediment removed during this step will be stockpiled on the Fields Landing site while waiting final disposition. Potential future uses may include beneficial reuse at the White Slough Unit. Erosion control BMPs will be installed at the site to minimize movement of sediment and/or water into wetlands and waters of the state.

2.2.4.4 Shoreline Stabilization

The shoreline in the restoration area will require stabilization following removal of the pilings, cobbles, and gravel to reduce wave-induced erosion that may otherwise increase due to lowering of the current wave slope. The following three alternatives are under consideration for shoreline stabilization. The proposed stabilization method will be chosen after additional engineering and biological analyses:

- Installation of rock riprap along the exposed shoreline
- Placement of a plastic sheet pile wall along the shoreline
- Excavation to create a new shoreline edge approximately 15 to 20 ft back from the current bank edge

2.2.5 Project Implementation

2.2.5.1 Staging, Laydown, and Storage Areas

Staging and laydown areas will be located at the Harbor District Boat Yard and vacant lot in Fields Landing, and in and adjacent to the deposition area. Actual sequencing of construction will be determined by the construction contractor and the laydown area chosen will be determined at the time of construction planning. Wetlands and native vegetation will be avoided.

2.2.5.2 Workforce

The project is expected to require a maximum of 10 people onsite daily during construction. Work shifts will generally be eight hours per day, five days per week. Nighttime activities are not planned or anticipated.

2.2.5.4 Demobilization

Demobilization and cleanup will include flushing the pipeline with clean water, collecting the floats, de-coupling the pipe sections, and moving the dredge and piping back to the Fields Landing Boat Yard. Demobilization of the pipeline will take approximately seven days. The infiltration berm at the receiving site will be dismantled and the rock buried, spread out, or used onsite. Rock will not be hauled offsite.

2.2.5.5 Project Schedule

Following site preparation activities, construction is currently planned to occur between July and October of 2016. Actual construction schedules will be determined by the construction contractor at the time of construction planning and could be different. The project will begin by implementing the pier piling and gravel removal elements of the eelgrass restoration program and then proceed with dredging and beneficial reuse of dredge sediments.

2.3 Avoidance and Minimization Measures/BMPs

Environmental impact avoidance and minimization measures have been designed to limit the risk of project-related impacts:

Fisherman's Channel Dredging

- Minimize impacts on eelgrass to the extent possible by reducing the original -8 ft MLLW dredge footprint that encompassed the entire bottom of Fisherman's Channel to the current plan's -6 ft MLLW and a narrow footprint. Only the mouth of Fisherman's Channel will have a -8 ft MLLW dredge depth. That change in dredging depth and width resulted in a reduction of the direct impacts on eelgrass from 1.1 ha (2.8 ac) to 0.48 ha (1.2 ac).
- In water work is scheduled to be implemented between July 1 and October 1 when no salmonids (or other anadromous fish) are expected to be present within Fisherman's Channel, thereby avoiding impacts on these species.
- Dredge pump will be primed close to the bottom of the channel to reduce potential for longfin smelt entrainment.
- Monitoring the cutter head location so that it maintains contact with the bay floor
- No dredging will occur along the side slopes outside of the designated dredge footprint, which will facilitate the retention of eelgrass in Fisherman's Channel, which will provide a source for recolonization of the dredged area.

Slurry Pipeline

- Bird nesting surveys will be conducted for any activities (i.e. vegetation removal along pipeline route) that may disturb nests during the breeding season.
- Wetlands will be identified and flagged by a qualified biologist and avoided.

White Slough Beneficial Reuse Area

- A berm and silt fences will be constructed/deployed in the White Slough beneficial reuse area to contain and filter water that will eventually be delivered to the bay during dredge spoils dewatering.
- Trash/debris contained in the dredge slurry will be screened and removed at the receiving site.

Fields Landing Eelgrass Restoration Area

- Wetlands near the pipeline route and Fields Landing eelgrass mitigation area will be identified and flagged by a qualified biologist and avoided.

- Any frogs observed on site will be captured by a qualified biological monitor and relocated into suitable wetland habitat along the east side of the Fields Landing property.
- Special-status plant species will be flagged by a qualified biological monitor for avoidance prior to the initiation of project activities in the Fields Landing area.
- Silt fences and/or straw waddles will be constructed/deployed around the sediment storage and placement locations at the Fields Landing mitigation area.

General

- A biological monitor will be present during pipeline deployment and on call during dredging operations.
- Implement a hydrocarbon spill prevention and clean-up plan to minimize the potential for project-related hydrocarbon contamination of bay waters. The dredge and support facilities will contain spill kits.
- Adaptive management measures (i.e., monitoring to determine whether dredging/placement rate needs to be adjusted based on efficacy of dewatering)
- Fugitive dust control measures to prevent generation of dust (due to concentrations of metals) during drying of the sediments.
- Traffic control measures during slurry placement/dewatering.

2.4 References Cited

GHD. 2012. Workplan for Sediment Sampling and Analysis (SAP) Prior to Dredging. Prepared for Pacific Gas and Electric Company.

GHD. 2013. Report of Findings Sediment Sampling and Analysis Fisherman's Channel. Prepared for Pacific Gas and Electric Company.

GHD. 2015. Workplan for Fisherman's Channel Dredge Sediment Sampling for Beneficial Reuse. Prepared for Pacific Gas and Electric Company.

USEPA (U.S. Environmental Protection Agency). 2007. Best Management Practices for pile removal and disposal. www.nws.usace.army.mil/.../forms/...Piling_Removal_BMP's_3_01_07.pdf

SECTION 3

Detailed Responses to Application Questions

The following are responses to individual questions posed on the Harbor District's permit application form that take additional space for a response (per the application instructions)

3.1 Project Description Questions (8–32)

Note: Questions 1 through 7 are answered in the permit application form.

8. **Site Size**

   Response: The dredging footprint at Fisherman's Channel is approximately 1.62 acres. The North Basin deposition at White Slough is approximately 2.5 acres in area. The Fields Landing eelgrass mitigation area will cover approximately 1.6 acres.

9. **Square Footage**

   Response: See response to item #8. The surface area of sediment to be removed will be approximately 70,570 square feet. The surface area of the eelgrass mitigation area is approximately 91,475. Laydown and soil stockpile areas will involve additional site area, but will not involve new construction or permanent fill.

10. **Number of floors of construction**

    Response: NA

11. **Amount of off-street parking provided**

    Response: Parking for dredge operations and construction staff will be within the existing HBRCD's Field's Landing Boat Yard.

12. **Attach plans.**

    Response: See Appendix A for plans of the berm and silt fencing system at White Slough

13. **Proposed scheduling**

    Response: Following site preparation activities, construction is currently planned to occur between July and October of 2016.

14. **Associated projects**

    Response: The Harbor District proposes this as a pilot project for future dredging activities within Humboldt Bay that are not yet planned or scheduled.

15. **Anticipated incremental development**

    Response: N/A

16. **If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected.**

    Response: Not residential.

17. **If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities.**

    Response: Not commercial.

Change in dust, ash, smoke, fumes, or odors in vicinity

Response: Yes. There may be minor increases in fumes from the dredge equipment, slurry pumps, and other construction vehicles. These would be temporary

26. Change in ocean, bay, lake, stream, or groundwater quality or quantity, or alteration of existing drainage patterns

Response: No.

27. Substantial change in existing noise or vibration levels in the vicinity

a. **During Construction**

Response: No. During construction, some large equipment, such as the dredge and slurry pumps and equipment used to remove the pier piles for the eelgrass mitigation site, will be in use, increasing the noise levels in the immediate vicinity of the project. In addition, the additional noise associated with this project will be temporary.

b. **During Project Utilization**

Response: No. There will be no uses of the project after completion that will generate substantial amounts of noise.

28. **Site on filled land or on slope of 10 percent or more**

Response: No.

29. **Use of disposal or potentially hazardous materials**, such as toxic substances, flammable or explosives

Response: No.

30. **Substantial change in demand for municipal services** (police, fire, water, sewage, etc.)

Response: No.

31. **Substantially increase fossil fuel consumption** (electricity, oil, natural gas, etc.)

Response: No. The project involves temporary construction activity to remove and beneficially reuse accumulated sediments.

32. **Relationship to larger project or series of projects**

Response: Yes. This project is considered a pilot project for future, currently undefined maintenance dredging projects in Humboldt Bay.

3.2 Environmental Setting Questions (33–39)

33. **Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures.** Attach photographs of the site. Snapshots or Polaroid photos will be accepted.

Response: Fisherman's Channel and the King Salmon Residential Canals were created in 1947 by dredging in an existing sand spit extending south of Buhne Hill. In 1952, PG&E purchased the property that is now the HBPP and constructed the intake canal as an extension of the Fisherman's Channel, as part of the original power plant's cooling water operations. PG&E also took ownership of the Fisherman's Channel at that time.

The Fisherman's Channel was historically maintained by PG&E through routine maintenance dredging. The last maintenance dredging was done in 1982, removing 21,000 cubic yards of sediment. The intake canal is no longer used by PG&E since the HBPP ceased operations. The new HBGS, which replaced HBPP's electrical generation and began operation in 2010, does not require water from the intake canal for cooling. Since the last dredging event, sediment has built up in Fisherman's Channel, hindering navigation.

Biological field reviews were conducted at the project site on:

- August 26 to 29, 2011 - Eelgrass survey of Fisherman's Channel and Residential fingers
- March 1, 2013 - Special-status species habitat assessment
- August 12, 2014 - Eelgrass survey of mouth of Fisherman's Channel; rare plant survey along banks of Fisherman's Channel
- January 22, 2015 - Special-status species habitat assessment

- May 21, 2015 and June 4, 2015 - Special-status plant survey at Fields Landing site

These summarized in detail in Appendix C, Biological Resources Evaluation.

There are no structures on the Fisherman's Channel site that will be affected by the project. Abandoned pier pilings are present at the Fields Landing eelgrass mitigation site and will be removed.

34. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.). Attach photographs of the vicinity. Snapshots or Polaroid photos will be accepted.

Response: Surrounding areas to the north of the Fisherman's Channel include the unincorporated community of King Salmon, which consists of homes with docks for access to the Fisherman's Channel and Humboldt Bay. Some fishing chartering companies are also located in this area. To the north/northeast is the site of the former HBPP as well as the newer HBGS and the Humboldt Bay Power Plant substation. Large tidal salt marshes are found to the south of the Fisherman's Channel. Buhne Point is a forested hill east and north of the Fisherman's Channel.

The White Slough beneficial reuse site is part of and surrounded by former tidal marshes of the Refuge and Humboldt Bay proper to the north. To the east is U.S. 101 and a sparsely populated, forested area. College of the Redwoods is located nearby to the south and east.

The Fields Landing eelgrass mitigation site is adjacent to Humboldt Bay, south of the Harbor District's boat maintenance yard and dock. The property immediately onshore of the mitigation area is currently unused open space and was formerly the site of a saw mill.

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?

Response: The dredging of Fisherman's Channel will restore access to Humboldt Bay by marine vessel to the residents of King Salmon and others at lower low tides and prevent the blockage of navigation in the Fisherman's Channel from further deterioration.

36. How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?

Response: The dredging project is necessary to maintain public vessel access to the Fisherman's Channel.

37. Financial statement:

a. Estimated cost of the project.

Response: Capital cost for this project is under development.

b. How will the project be financed?

Response: HBHRD will finance the project. Permitting of the project is being financed by PG&E as a community benefit.

38. Describe full directions necessary to arrive at project site.

Response: From Highway 101, exit King Salmon Avenue heading northwest and proceed 0.35 miles to the King Salmon Avenue bridge over Fisherman's Channel/HBPP Intake Canal.

39. **Will the Applicant agree that as a condition of the permit being issued to Applicant, to indemnify and hold harmless the Humboldt Bay, Harbor recreation and Conservation District from any and all claims, demands, or liabilities for attorneys' fees obtained from or against demands for attorney's fees, costs of suit, and costs of administrative records made against District by any and all third parties as a result of third party environmental actions against District arising out of the subject matter of this application and permit, including, but not limited to attorney's fees, costs of suit, and costs of administrative records obtained by or awarded to third parties pursuant to the California Code of Civil Procedure Section 1021.5 or any other applicable local, state, or federal laws, whether such attorneys; fees, costs of suit, and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal, or arbitration of claims for attorneys' fees and costs of administrative records in connection with the subject matter of this application and permit?**

Response: The Harbor District is the Applicant.

Get your neighbors to sign

Call Jim Roberts to pick-up

530-515-8645

or bring to the meeting March 3rd

NEED HELP

Meeting March 3, 2016 Woodley Island 6pm

Humboldt Bay Harbor, Recreation and Conservation District

King Salmon Dredging

The people of King Salmon want their canals dredged.

1)Name: Natalie Soder Address: 2222A Ravenwood Pl. Ln. 95519
Phone number: 707/839-4117

2)Name: Linda Yates Address: P.O. Box 6086, Eureka, CA 95502
Phone number: 707-407-7361

3)Name: Diana Williams Address: 3096 18th St. Eureka, CA 955
Phone number: 707-502-9799

4)Name: Robin Andrew Address: 580 5th st. Arcata CA 95521
Phone number: (707) 498-5462

5)Name: Carolyn Allee Address: 3935 Davis Ct, Eureka 95503
Phone number: 476-0454

6)Name: Lisa Rix Address: 535 Valley View Dr Eureka 95503
Phone number: 707-616-2006

7)Name: Gerald McGee Address: 1215 King Salmon Ave
Phone number: (707) 444 8316

8)Name: _____ Address: _____
Phone number: _____

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530-515-8645

or bring to the meeting March 3rd

NEED HELP

Meeting March 3, 2016 Woodley Island 6pm

Humboldt Bay Harbor, Recreation and Conservation District

King Salmon Dredging

The people of King Salmon want their canals dredged.

1)Name: Ann Blackwood Address: 1735 G St Eureka 955
Phone number: 707 444-9561

2)Name: Kim Schneider Address: 917 1 St. Apt B Eureka 9550
Phone number: 707-601-1784

3)Name: Monica Eckert Address: 533 Warren Creek
Phone number: 707-826-1568

4)Name: Carolyn Doering Address: 15 W. 15th St., Eureka
Phone number: 707-601-1731

5)Name: Varda Greenberg Address: 4522 Cummings Rd. Eureka
Phone number:

6)Name: Constance Mitchell Address: 1033 1st apt B Eureka Ca 955
Phone number: 672-6536

7)Name: Loren Perdue Address: 1019 Del Norte
Phone number: 497-6225

8)Name: Pamela Mills Address: 4334 excelsic Rd, Eureka
Phone number: 707-362-6124

Get your neighbors to sign

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530-515-8645

or bring to the meeting March 3rd

NEED HELP

Meeting March 3, 2016 Woodley Island 6pm

Humboldt Bay Harbor, Recreation and Conservation District

King Salmon Dredging

The people of King Salmon want their canals dredged.

1)Name: GEORGE Still **Address:** 10 CRAb St EUREKA
Phone number: 707-444-2607

2)Name: Jill Creech **Address:** 10 Barscape Ln Eureka 95503
Phone number: (707) 499-5304

3)Name: HUNTER JOHN **Address:** 135 COD ST.
Phone number: 267-563-0517.

4)Name: Chris Puryear **Address:** 1875. Buhne Dr
Phone number: (707) 442-1118

5)Name: ________ **Address:** ________
Phone number: ________

6)Name: ________ **Address:** ________
Phone number: ________

7)Name: ________ **Address:** ________
Phone number: ________

8)Name: ________ **Address:** ________
Phone number: ________

King Salmon Dredging
The people of King Salmon want their canals dredged.

1)Name: John Steven Cousins Address: 44 Sole Street
Phone number: 209 968 4934

2)Name:_____ Address: _____
Phone number:_____

3)Name:_____ Address: _____
Phone number:_____

4)Name:_____ Address: _____
Phone number:_____

5)Name:_____ Address: _____
Phone number:_____

6)Name:_____ Address: _____
Phone number:_____

7)Name:_____ Address: _____
Phone number:_____

8)Name:_____ Address: _____
Phone number:_____

9)Name:_____ Address: _____
Phone number:_____